Description of Data Elements

HCUP State Inpatient Databases (SID)

Volume 5 - Data Elements Beginning with letters R-Z

This document contains cumulative descriptions of data elements across all HCUP Central Distributor states and years of HCUP data from 1988 to the current data year. Please refer to the separate documents on the Availability of Data Elements (1995-1997) and (1998-2003) for specific information on which states and data elements are included in each year of the SID.

Not all data elements are uniformly coded or available across all the states. Please check the "State Specific Notes" section for each data element before analysis.

Table of Contents

RACE - Race	3
RACE_X - Race, as received from data source	15
RATEn - Daily rate	16
RDRG - Refined DRG	17
RDRGWT - Refined DRG weight	20
READMIT - Readmission	22
REVCDn - Revenue code	23
SEQ_SID - HCUP SID sequence number	40
SEX - Sex of the patient	41
SURGID_S - Synthetic primary surgeon number	43
SURGSPEC - Primary surgeon specialty, as received from source	47
TMDXn - Diagnosis present at admission	56
TOTCHG - Total charges, cleaned	57
TOTCHG_X - Total charges, as received from data source	63
TOWN - Patient town of residence, as received from source	69
UNITn - Units of service	89
YEAR - Calendar year	100
ZIP - Patient zip code	101
ZIP_S - Synthetic patient zip code	105
ZIP3 - Patient ZIP Code, first 3 digits	107

RACE - Race

General Notes

HCUP coding includes race and ethnicity in one data element (RACE). If the source supplied race and ethnicity in separate data elements, ethnicity takes precedence over race in setting the HCUP value for race.

Two HCUP data elements contain source-specific information about the race and ethnicity of the patient.

- RACE_X retains information on the race of the patient as provided by the data source.
- HISPANIC_X retains information on the Hispanic ethnicity as provided by the data source.

Not all data sources provide information on race (RACE_X) and ethnicity (HISPANIC_X).

Uniform Values					
Variable	Description	Value	Value Description		
RACE	Race	1	White		
		2	Black		
		3	Hispanic		
			Asian or Pacific Islander		
				5	Native American
		6	Other		
			Missing		
	.A		Invalid		
		.B	Unavailable from source (coded in 1988- 1997 data only)		

State Specific Notes

Arizona

	Arizona			
	(Beginning July	2003)		
RACE_X RACE				
Value	Description	Value	Description	
5	White	1	White	
3	Black or African American	2	Black	
4	Hispanic or Latino	3	Hispanic	
2	Asian		Asian or Pacific	
6	Hawaiian Native or Other Pacific Islander	4	Islander	
1	American Indian or Alaska Native	5	Native American	
		6	Other	
9	Refused		Missing	
Blank Missing		-	Missing	
Any va	alues not documented by the data	.A	Invalid	
Separa availat	ate information on ethnicity is not proble.	vided. H	ISPANIC_X is not	

Arizona				
	(Valid through June 2003)			
	RACE_X		RACE	
Value	Description	Value	Description	
5	Caucasian, Non Hispanic	1	White	
3	Black	2	Black	
4	Caucasian, Hispanic	3	Hispanic	
2	Asian, Pacific Islander	4	Asian or Pacific Islander	
1	American Indian, Aleut, Eskimo	5	Native American	
6	Other	6	Other	
9	9 Refused		Missing	
Blank	Missing		iviissiiig	
Any val source	ues not documented by the data	.A	Invalid	

Separate information on ethnicity is not provided. HISPANIC_X is not available.

California

	California			
	RACE_X		RACE	
Value	Description	Value	Description	
1	White	1	White	
2	Black	2	Black	
If HISPA	ANIC_X = 1	3	Hispanic	
4	Asian/Pacific Islander	4	Asian or Pacific Islander	
3	Native American/Eskimo/Aleut	5	Native American	
5	Other	6	Other	
6	6 Unknown		Missing	
Blank Missing			Missing	
Any values not documented by the data source		.A	Invalid	
	HISPANIC_	X		
	1	Hispani	С	
	2	Non-His	spanic	
	3	Unknov	/n	

Information on ethnicity was provided by California and used to code RACE beginning in 1995. The variable HISPANIC_X was retained on the HCUP databases beginning in 1998.

There are a small number of discharges with undocumented values in HISPANIC_X that are not considered valid by the data source.

Colorado

Colorado				
RACE_X			RACE	
Value	Description	Value	Description	
1	White	1	White	
2	Black	2	Black	
5	Hispanic	3	Hispanic	
3	Asian	4	Asian or Pacific Islander	

4	Native American	5	Native American	
6 Other		6	Other	
7,0, Blank Missing			Missing	
Any other values .A Invalid				
Separate information on ethnicity is not provided. HISPANIC_X is not available.				

Florida

Value 1 2	RACE Description White Black
1	White
2	
2	Black
3	Lliononio
3	Hispanic
4	Asian or Pacific Islander
5	Native American
6	Other
	Missing
.A	Invalid
	4 5 6

available.

Iowa

	lowa		
RACE_X			RACE
Value	Description	Value	Description
1	White	1	White
2	Black	2	Black
		3	Hispanic
4	Asian or Pacific Islander	4	Asian or Pacific Islander
3	American Indian or Alaskan native	5	Native American
		6	Other

9, Blank Other/Unknown, Missing		Missing
Any values not documented by the data source	.A	Invalid

lowa does not separately classify Hispanic (RACE = 3). No documentation was available about how these were coded. HISPANIC_X is not available.

lowa uses one category for "Other" and "Unknown", which is assigned to the HCUP category for missing (.).

Some Iowa hospitals report "Other" race for all or a high percentage of their discharges. Some hospitals report "White" race for all discharges.

Maryland

Beginning in 1993, Maryland reported Hispanic ethnicity as a separate variable. If patient ethnicity was coded as Spanish/Hispanic origin, patient race was set to Hispanic (RACE = 3) during HCUP processing.

Prior to 1993, Maryland did not report Hispanic ethnicity as a separate variable or category of race. Hispanic ethnicity (RACE = 3) is not coded in the 1988-1992 HCUP Maryland data. The source documentation available for Maryland did not indicate which race code(s) were used for Hispanic ethnicity.

	Maryland		
RACE_X			RACE
Value	Description	Value	Description
1	White	1	White
2	African American	2	Black
If HISP	ANIC_X = 1	3	Hispanic
3	Asian or Pacific Islander	4	Asian or Pacific Islander
4	American Indian, Eskimo, Aleut	5	Native American
5	Other	6	Other
9	. Missing		Missing
Blank			iviissirig
Any values not documented by the data source		.A	Invalid
	HISPANIC_	X	
	1	Spanis	sh/Hispanic origin
2 Not o		Not of	Spanish/Hispanic

	origin
9	Unknown

Massachusetts

Massachusetts					
(Valid beginning October 1999)					
	RACE_X		RACE		
Value	Description	Value	Description		
1	White	1	White		
2	Black	2	Black		
4	Hispanic	3	Hispanic		
3	Asian	4	Asian or Pacific Islander		
5	American Indian	5	Native American		
6	Other	6	Other		
9, Blank	Unknown, Missing		Missing		
Any values not documented by the data source .A Invalid			Invalid		
Separate inf available.	Separate information on ethnicity is not provided. HISPANIC_X is not				

Massachusetts				
	(Valid prior to Octo	ber 1999	9)	
	RACE_X		RACE	
Value	Description	Value	Description	
1	White	1	White	
2	Black	2	Black	
9	Hispanic	3	Hispanic	
6	Asian	4	Asian or Pacific Islander	
5	American Indian	5	Native American	
3	Other	6	Other	
4, Blank	Unknown, Missing		Missing	
Any values r source	not documented by the data	.A	Invalid	
Separate inf	ormation on ethnicity is not pro	ovided. H	ISPANIC_X is not	

available.

Michigan

Michigan					
	RACE_X		RACE		
Value	Description	Value	Description		
4	White	1	White		
3	Black	2	Black		
If HISPAN	NIC_X = 1	3	Hispanic		
2	Asian or Pacific Islander	4	Asian or Pacific Islander		
1	American Indian/Eskimo/Aleut	5	Native American		
5	Other	6	Other		
0, Blank	Missing, invalid or unrecorded		Missing		
Blank	Missing		iviissirig		
Any value source	es not documented by the data	.A Invalid			
	HISPANIC_>	(
	1	Hispar	nic origin		
	2	Other			
0		Unkno	wn or not stated		

New Jersey

	New Jersey				
	RACE_X		RACE		
Value	Description	Value	Description		
1	White	1	White		
2	Black	2	Black		
If HISPA	ANIC_X = 1, 2, 3, 4, or 5	3	Hispanic		
4	Chinese		Asian or Pacific Islander		
5	Japanese				
6	Hawaiian (including part Hawaiian)	4			
7	Filipino				
8	Other Asian or Pacific Islander				
3	Indian (North American, Central American, South American, Eskimo,	5	Native American		

	Aleut)				
0	Other races	6	Other		
9, Blank	Unknown, Missing		Missing		
Any values not documented by the data source		.A	Invalid		
HISPANIC_X		X			
0		Non-l	Non-Hispanic		
1		Mexic	Mexican		
2		Puert	Puerto Rican		
3		Cuba	Cuban		
4		Centr	Central or South American		
	5		and Unknown nic		
	9	Not C	Classified or Unknown		

Beginning in 1993. New Jersey reported Hispanic ethnicity as a separate variable. If patient ethnicity was coded as Hispanic (Mexican, Puerto Rican, Cuban, Central or South American, Other or Unknown Hispanic), patient race was set to Hispanic (RACE = 3) during HCUP processing.

Prior to 1993. New Jersey reported Hispanic ethnicity as a category of race. If New Jersey reported patient race as Hispanic, HCUP assigned patient race as Hispanic (RACE = 3).

New York

	New York				
	RACE_X		RACE		
Value	Description	Value	Description		
01	White	1	White		
02	African American (Black)	2	Black		
If HISP	ANIC_X = 1	3	Hispanic		
04	Asian	4	Asian or Pacific Islander		
04	Asian	05	Native Hawaiian or Other Pacific Islander		
03	Native American (American Indian, Eskimo, Aleut)	5	Native American		
88	Other	6	Other		
99,	Missing		Missing		

Blank				
Any values not documented by the data source		.A	Invalid	
HISPANIC				
1	Spanish/Hispanic origin	1	Spanish/Hispanic origin	
2	Not of Spanish/Hispanic origin	2	Non-Spanish/Non-Hispanic	
9, Blank	Missing	9	Unknown	

North Carolina

Value 1 2	RACE Description White Black
1	White
1 2	
2	Black
3	Hispanic
4	Asian or Pacific Islander
5	Native American
6	Other
	Missing
.A	Invalid
	5 6

Separate information on ethnicity is not provided. HISPANIC_X is not available.

Reporting of the race of the patient is optional for hospitals in North Carolina.

Rhode Island

	Rhode Island					
	(Valid beginning 1/1/03-3/31/03)					
	RACE_X RACE					
	Value	Description	Value Description			
1		White	1	White		
2		Black	2	Black		
5		Hispanic	3	Hispanic		
3		Asian	4	Asian or Pacific		

			Islander
4	Native American	5	Native American
6	Other	6	Other
Blank, 9	Missing, Unknown		Missing
Any values not documented by the data source .A Invalid			
Separate information on ethnicity is not provided. HISPANIC_X is not available.			

	Rhode Island			
	(Valid beginning 4/1/03)			
	RACE_X		RACE	
Value	Description	Value	Description	
А	White	1	White	
В	Black	2	Black	
	If HISPANIC_X=1	3	Hispanic	
С	Asian	4	Asian or Pacific	
E	Hawaiian/Pacific Islander	7	Islander	
D	Native American	5	Native American	
F	White/Black			
G	White/Asian		Other	
Н	White/American Indian or Alaska Native			
I	White/Native Hawaiian or Other Pacific Islander			
J	Black/Asian			
K	Black/American Indian or Alaska Native			
L	Black/Native Hawaiian or Other Pacific Islander	6		
М	Asian/American Indian or Alaska Native			
N	American Indian or Alaska Native/Native Hawaiian or Other Pacific Islander			
0	Asian/Native Hawaiian or Other Pacific Islander			
Р	All Others			
Blank, Q	Missing, Not provided	-	Missing	

Any values not documented by the data source	.A Invalid	
HISPANIC_X		
1	Hispanic	
2	Not Hispanic	
3	Not Reported	

	Rhode Isla	nd		
	(Valid through	2002)		
	RACE_X		RACE	
Value	Description	Value	Description	
4	White, not Hispanic	1	White	
3	Black, not Hispanic	2	Black	
7	White Hispanic	3	Hienanie	
8	Black Hispanic	3	Hispanic	
2	Asian	4	Asian or Pacific Islander	
1	Native American	5	Native American	
5	Other	6	Other	
Blank, 6	Missing, Unknown		Missing	
Any values source	not documented by the data	.A	Invalid	
Separate in available.	formation on ethnicity is not pro	ovided. H	ISPANIC_X is not	

South Carolina

South Carolina					
	RACE_X		RACE		
Value	Description	Value	Description		
1	White	1	White		
2	African American	2 Black			
6	Hispanic	3	Hispanic		
3	Asian	4 Asian or Pacific Islander			
4	American Indian	5 Native American			
5	Other	6	Other		
Blank	Missing		Missing		

Any values not documented by the data source	.A	Invalid	
Separate information on ethnicity is not provided. HISPANIC_X is not available.			

Wisconsin

	Wisconsin		
RACE_X			RACE
Value	Description	Value	Description
4	White	1	White
3	Black	2	Black
If HISPA	NIC_X = 1	3	Hispanic
2	Asian or Pacific Islander		Asian or Pacific Islander
1	American Indian or Alaskan Native	5	Native American
5	Other	6	Other
6, Blank	Unknown, Missing		Missing
Any valu source	es not documented by the data	.A	Invalid
	HISPANIC_X		
	1	Hispanic origin	
	2	Not of Hispanic origin	
	6	Unkno	wn

RACE_X - Race, as received from data source

General Notes

RACE_X retains information on the race of the patient as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

Two HCUP data elements contain other information about the race of the patient:

- HISPANIC_X retains information on the Hispanic ethnicity as provided by the data source.
- RACE contains uniformly coded information about the race and ethnicity of the patient. The data element RACE should be used when analyzing race across data sources.

	Uniform Values				
Variable	Description	Value	Value Description		
RACE_X	Race, as received from data source	n(a)	State specific coding - See the "State Specific Notes" section for details		

State Specific Notes

Information on State specific coding for this data element is available under the "State Specific Notes" section for the data element RACE.

RATEn - Daily rate

General Notes

The daily rate (RATEn) is retained as provided by the data source. Zero values are retained and NOT set to missing (.). Negative values are set to invalid (.A).

Uniform Values				
Variable	Description	Value	Value Description	
RATEn	Daily rate	4(n).nn	Dollars	
		•	Missing	
		.A	Invalid	

State Specific Notes

New York

Detailed charges (CHGn) are associated with the identified revenue centers (REVCDn), units of service (UNITn) and rates (RATEn). For example, CHG1 applies to the revenue center in REVCD1 for the rate in RATE1 and the units of service specified in UNIT1. Revenue codes are available for accommodation and ancillary charges. Units and rates are available for accommodation charges.

RATE1-RATE5 contain accommodation rates.

See note under revenue codes (REVCDn) for definitions of revenue codes associated with these accommodation rates (RATEn).

Adjustment to Charges for Interim Bills

- For 1988-1992, when the length of stay from the Discharge Data Abstract did not
 equal the length of the billing period from the Uniform Billing Form, total charges
 (TOTCHG) and charge details (CHGn, RATEn, UNITn, REVCDn) were set to
 missing (.) because this billing information pertained only to the billing period, not
 the complete inpatient stay. However, TOTCHG_X contains the original value
 from the billing record.
- Beginning in 1993, billing dates were not reported by New York and the adjustment to charge details (CHGn, RATEn, UNITn, REVCDn) was not made.

RDRG - Refined DRG

General Notes

Refined DRGs were developed at Yale University in response to criticism that HCFA DRGs were not appropriate for non-Medicare populations and did not adequately adjust for patient severity. The HCFA DRGs were expanded to better accommodate pediatric and neonate cases, and DRGs for other high cost conditions like trauma and HIV were expanded. All age and complications and comorbidity (CCs) splits of HCFA DRGs were eliminated and replaced by subclasses (Refinement Classes) to indicate severity. Some RDRGs are consistent with HCFA DRGs.

Secondary diagnoses are used to determine complications and comorbidity. The CCs are used to subdivide DRGs into Refinement Classes based upon the highest level secondary diagnosis. Surgical patients are split into the four Refinement Classes. Medical patients are split into three Refinement Classes. The Refinement Class indicates varying levels of impact on patient resource use.

Surgical Refinement Class	Medical Refinement Class	Description
0	0	Baseline/No substantial CCs
1	1	Moderate CCs
2	2	Major CCs
3	-	Catastrophic CCs

The last digit of the RDRG value is the refinement class. The preceding digit(s) are the refined DRG category.

How the RDRG value provided by the data source is stored in the HCUP databases varies by year. - In the 1988-1997 HCUP databases, RDRG is stored in a numeric field which causes leading zeros to be removed. Consider the following examples:

HCUP RDRG Value (1988- 97)	Refined DRG Category	Refinement Class
50	5	0
892	89	2
1821	182	1

 Beginning in the 1998 data, RDRG is stored in a character field which retains leading zeros. Consider the following examples:

HCUP RDRG Value (Beginning in the 1998 data)	Refined DRG Category	Refinement Class
0050	5	0
0892	89	2
1821	182	1

Uniform Values				
Variable	Description	Value	Value Description	
RDRG	Refined DRG	aaaa	RDRG value	
		Blank	Missing	
		А	Invalid	

State Specific Notes

Kentucky

Source documentation does not indicate which version of the Refined DRG grouper was used.

North Carolina

Source documentation does not indicate which version of the Refined DRG grouper was used.

Oregon

Beginning in the 1997 data, Oregon supplied the Refined DRG (RDRG). There was no source documentation on which version of the HCFA Grouper was used to assign the RDRGs.

Washington

Beginning in 1998, RDRG is loaded as a character variable so that the leading zero are retained in the values (e.g., the number 4 is read as the character values "004").

Based on documentation supplied by Washington, the HCFA Grouper version for RDRG is as follows:

Time Period	HCFA Grouper Version
10/92 - 09/93	10.0
10/93 - 09/94	11.0
11/94 - 09/95	12.0
10/95 - 09/96	13.0
10/96 - 09/97	14.0
10/97 - 09/98	15.0
10/98 - 09/99	16.0
10/99 - 09/00	17.0
10/00 - 09/01	18.0
10/01 - 09/02	19.0
10/02 - 09/03	20.0

RDRGWT - Refined DRG weight

General Notes

The RDRG relative weight (RDRGWT) is retained as provided by the data source. During HCUP processing, the weights are assigned as reported, without modification. Nonnumeric values are set to invalid (.A).

Uniform Values					
Variable Description Value Value Description					
RDRGWT Refined DRG	nnnn.nn	RDRG weight			
	weight		Missing		
		.A	Invalid		

State Specific Notes

Washington

Based on documentation supplied by Washington, the version of the Washington State specific RDRG relative weight (RDRGWT) is as follows:

Time Period	Washington State specific relative weight Version
10/92 - 09/93	10.0
10/93 - 09/94	11.0
11/94 - 09/95	12.0
10/95 - 09/96	13.0
10/96 - 09/97	14.0
10/97 - 09/98	15.0
10/98 - 09/99	16.0
10/99 - 09/00	17.0
10/00 - 09/01	18.0
10/01 - 09/02	19.0
10/02 - 09/03	20.0

When Washington first supplied RDRG weight in their 1993 inpatient data, source documentation specified a format of 6.2 (nnnn.nn) for RDRGWT. In 1995, source documentation specified a format of 6.4 (nn.nnnn) for RDRGWT. From 1995-2001, RDRGWT continued to be loaded in the 6.2 (nnnn.nn) format for consistency with previous years.

Beginning in 2002, the data was provided to HCUP in SAS format and appears to be in 6.4 format. Values will not be consistent with previous years.

READMIT - Readmission

General Notes

Information on readmissions (READMIT) is retained as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

Uniform Values				
Variable	Description	Value	Value Description	
READMIT Readmission	0	Not a readmission		
		1	Readmission	
			Missing	
		.A	Invalid	

State Specific Notes

New Jersey

A readmission (READMIT = 1) is defined as admission to the same facility from which the patient was discharged within the previous seven days.

REVCDn - Revenue code

General Notes

Revenue center codes specify a specific accommodation, ancillary service, or billing calculation. Many states use the codes defined by the UB-92, but some states have developed their own coding scheme. Line item revenue center codes specify a specific accommodation, ancillary service, or billing calculation. States Data organizations that report line item revenue center codes use UB-92 definitions as defined by the National Uniform Billing Committee. Revenue codes (REVCDn) are retained as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific. No validity checks are performed.

Uniform Values				
Variable	Description	Value	Value Description	
REVCDn	Revenue code	nnnn	Revenue Code	
		Blank	Missing or Invalid	

State Specific Notes

Kentucky

Detailed charges (CHGn) are associated with identified revenue centers (REVCDn) and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1, the units of service specified in UNIT1. Kentucky reports detailed charges (CHGn) associated with standard UB-92 revenue codes stored in REVCDn. Kentucky does not collapse or redefine ranges of revenue codes.

Information on total charges (revenue center 001) was removed from the detailed charge arrays. (CHGn, REVCDn, and UNITn). Information on total charges is available in the HCUP variables TOTCHG and TOTCHG_X.

Maine

Detailed charges (CHG1-CHG33) are associated with the identified revenue centers (REVCD1-REVCD33), and units of service (UNIT1-UNIT3). For example, CHG1 applies to the revenue center in REVCD1 and the units of service specified in UNIT1. Revenue

codes are available for accommodation and ancillary charges. Units are available for accommodation charges.

Massachusetts

The charge detail provided by Massachusetts varies across years.

- Starting in 1999: Detailed charges (CHGn) are associated with the UB-92 revenue centers (REVCDn), and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 and the units of service are specified in UNIT1. Massachusetts provides 110 revenue codes, detail charges, and units, but not all revenue centers (REVCDn) have an associated charge (CHGn = .). During HCUP processing, the array of revenue codes, charges, and units are condensed so that only the revenue codes that have non-missing charges are retained. No information is lost.
- In 1998: Detailed charges (CHGn) are associated with the UB-92 revenue centers (REVCDn), and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 and the units of service are specified in UNIT1. Massachusetts provides 110 revenue codes, detail charges, and units, but not all revenue centers (REVCDn = .) have a charge (CHGn = .). The revenue codes are constant across records. For example, REVCD1 = 111 on all discharges even if there is no charge (CHG1 = .) for that revenue center.
- Prior to 1998: Revenue codes are not retained on the discharge record. The
 detailed charges and units are retained on the HCUP files in assigned positions.
 For example, CHG1 is always for UB-92 revenue code 111 "Routine
 Medical/Surgical." See the variable note for CHGn for more details.

Because of the timing of HCUP data processing for the 1999 NIS, the Massachusetts source file provided to HCUP was an interim file that included records that had failed edit checks. The percent of failed records is very small, ranging from 0.0% to 1.5% (with a mean of 0.4%) for most hospitals. A handful of hospitals had a large percent of failed records. Failed records have one or more of the following errors:

- Invalid diagnosis code *
- Invalid procedure code *
- Invalid or missing birth weight
- Invalid claim certificate number **
- Invalid or inconsistent UB-92 revenue code
- Invalid medical record or person number
- Invalid type of payer *
- Inconsistent primary and secondary payer
- Invalid physician identifier
- Invalid patient or employer ZIP Code. **

^{*} These errors would have been handled during HCUP data processing.

** These data elements are not included in the HCUP data files.

Nebraska

Detailed charges (CHGn) are associated with the identified revenue centers (REVCDn) and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 for the rate in RATE1 and the units of service specified in UNIT1. Revenue codes and units are available for accommodation and ancillary charges. Rates are available only for accommodation charges.

Nebraska provided the charge detail in a separate, linkage file that was not edited. During HCUP processing, the source file was manipulated to be consistent with the format of detail charge information in other states. The source file had one record per service, multiple records per discharge. The HCUP file has one record per patient that includes all of the provided detail.

Nevada

Detailed charges (CHGn) are associated with the identified revenue centers (REVCDn) and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 and the units of service specified in UNIT1.

In the rare event that there were more revenue charges than could be retained in the array of revenue codes, charges, and units, Nevada set the revenue code to "9999", the charge to the sum of the remaining charges, and the units to the sum of the remaining units.

New York

Detailed charges (CHGn) are associated with the identified revenue centers (REVCDn), units of service (UNITn) and rates (RATEn). For example, CHG1 applies to the revenue center in REVCD1 for the rate in RATE1 and the units of service specified in UNIT1. Revenue codes are available for accommodation and ancillary charges. Units and rates are available for accommodation charges.

- REVCD1-REVCD5 contain accommodation revenue centers and
- REVCD6-REVCD25 contain ancillary revenue centers.

Adjustment to Charges for Interim Bills

For 1988-1992, when the length of stay from the Discharge Data Abstract did not
equal the length of the billing period from the Uniform Billing Form, total charges
(TOTCHG) and charge details (CHGn, RATEn, UNITn, REVCDn) were set to
missing (.) because this billing information pertained only to the billing period, not
the complete inpatient stay. However, TOTCHG_X contains the original value
from the billing record.

• Beginning in 1993, billing dates were not reported by New York and the adjustment to charge details (CHGn, RATEn, UNITn, REVCDn) was not made.

Revenue Codes for Accommodations (REVCD1-REVCD5)

Valid accommodation revenue codes used in REVCD1-REVCD5 are listed below:

Codes marked with a dash (-) are only valid beginning in 1994.

All other codes are only valid before 1994.

	203x Detoxification Unit - Alcohol Acute
-	204x Alcohol Rehabilitation - Acute Care
	205x Mental Retardation - Acute Care
	208x Detoxification Unit - Drug Acute
	217x Mental Rehabilitation - Acute Care
-	218x Rehabilitation - Medical Acute
-	219x Alternate Level of Care Unit
-	301x Medical/Surgical - Acute
-	317x Pediatric - Acute
-	321x Psychiatric - Acute
-	325x Obstetrics (including gynecological)
	363x Psychiatric - Long Term Care
-	370x AIDS Unit
-	376x Drug Rehabilitation - Acute Care
-	377x Epilepsy Unit
-	378x Comprehensive Psychiatric Emergency Program Observation Bed
-	379x Tuberculosis
-	380x Traumatic Brain Injury - Acute Care
-	381x Ventilator Dependent - Acute Care
-	382x Other Long-Term Care
-	383x Skilled Nursing Facility
-	384x Hospice

Valid fourth digits ("x") for the above accommodation codes are:

1	Private Room - 1 bed
2	Semi-Private - 2, 3, or 4 beds
3	Ward - 5 or more beds
6	Isolation - special isolation services
8	Alternate Level of Care

The following accommodation revenue codes, used in REVCD1-REVCD5, were always used exactly as they are listed below.

3310	Medical/Surgical Intensive Care
3330	Coronary Care
3350	Pediatric Intensive Care
3370	Neonatal Intensive Care
3380	Burn Care
3410	Other Intensive Care
3510	Newborn Nursery
3520	Premature Nursery
3711	Secured Room Charge (correctional facility inmates)

Revenue Codes for Ancillary Services (REVCD6-REVCD25)

Ancillary Revenue Codes: Beginning in 1994

Beginning in 1994, New York employed a set of state-specific Ancillary revenue codes based on the UB-92 coding system. The new system is extensive and well documented in Appendix J of the SPARCS Inpatient Output Data Dictionary.

Ancillary Revenue Codes: 1988-1993

Ancillary revenue center codes are three-character codes. For 1988-1992 data, the ancillary revenue center codes are left-justified, with a blank in the fourth column (e.g., '401 '). Beginning with the 1993 data, the ancillary revenue center codes are right-justified, with a leading zero (e.g., '0401').

For 1988-1993, the following lists the valid ancillary revenue codes used in REVCD6-REVCD25.

440	Electrical Transcription
116	Electroshock Therapy
117	Intravenous Therapy
119	Pulmonary Function, Other
120	Diagnostic Services, Other
127	Lithotripsy
136	Gastro-Intestinal Services
137	Gastro-Intestinal Services, other
138	Urology
139	Oncology
234	Ambulance Service
235	Clinic
236	Emergency Room
401	Labor and Delivery Services
404	Operating Room Services
406	Recovery Room
408	Anesthesiology
411	Medical/Surgical Supplies
415	Pharmacy
421	Laboratory Services - Clinical
423	Laboratory Services - Pathology
426	Blood Processing and Storage
429	Electrocardiography (EKG/ECG)
431	Cardiac Catheterization Laboratory
432	Radiology Diagnostic
434	CT Scanner
436	Radiology Therapeutic
438	Nuclear Medicine
442	Respiratory Therapy
444	Pulmonary Function Testing
446	Neurology - Diagnostic (EEG)
451	Physical Therapy
453	Occupational Therapy
455	Speech - Language Pathology
457	Recreational Therapy
	Audiology

459 Physical Medicine, other467 Psychiatric/Psychological Service	
467 Psychiatric/Psychological Service	
471 Renal Dialysis - General	
473 Organ Acquisition - General	
475 Organ Acquisition - Other Donor Bank	
476 Hemodialysis (Inpatient)	
Peritoneal Dialysis (Inpatient)	
478 Continuous Ambulatory Peritoneal Dialysis (CAPD) Inpatient	
479 Continuous Cycling Peritoneal Dialysis (CCPD) Inpatient	
491 Ancillary Services, other	
Telephone and Telegraph Revenue	
Television/Radio Rentals	
990 Outpatient Services, Other	

North Carolina

Beginning in 2002, detailed charges (CHGn) are associated with the identified revenue centers (REVCDn) and units of service (UNITn), and daily rates (RATEn). For example, CHG1 applies to the revenue center in REVCD1, the units of service specified in UNIT1, and the rate in RATE1. North Carolina reports detailed charges (CHGn) associated with standard UB-92 revenue codes stored in REVCDn.

Washington

Overview

Revenue codes (REVCDn) identify the revenue center for which the detailed charges (CHGn) apply in the number of units (UNITn) given. For example, CHG1 applies to the revenue center in REVCD1 and the units of service specified in UNIT1. Units are not required for all revenue sources; the unit's field may be coded as missing (.) or zero.

Caveats

Beginning in 2000, if total charges are identified in the detail charges (REVCDn = "001"), the corresponding detail charge, unit, and revenue code are set to missing.

Outpatient revenue codes (REVCDn = 500 or 509) are used when patient is admitted as an inpatient before midnight of the day following the date of service. Late discharges for medical necessity are to be shown under Discharge, Medically Necessary (REVCDn = 224), rather than under room charge. Hourly nursing charges are in addition to room and board for ICU and CCU. Other Drugs (REVCDn = 259) is a code for "Generic Take"

Home Drugs." Treatment or Observation Room revenue codes are used when the patient is held in an observation room and then subsequently admitted.

Invalid Revenue Codes

Revenue codes in 1988-1992 were kept as reported; no validity check was performed. In 1993-1994, invalid revenue codes (values less than 100, greater than 999, and alpha-numeric codes) were set to "A" (REVCDn = "A"). Starting in 1995, invalid codes were set to missing (REVCDn = " ").

Revenue Codes and Associated Units

Below are the revenue codes and units associated with the charges for each patient bill:

MEDICARE REQUIRED

ROOM AND BOARD, PRIVATE UNITS OF SERVICE

110 = General Classification	DAYS
111 = Medical/Surgical/GYN	DAYS
112 = OB	DAYS
113 = Pediatric	DAYS
114 = Psychiatric	DAYS
115 = Hospice	DAYS
116 = Detoxification	DAYS
117 = Oncology	DAYS
118 = Rehabilitation	DAYS
119 = Other	DAYS

ROOM AND BOARD, SEMI PRIVATE TWO BEDS

120 = General Classification	DAYS
121 = Medical/Surgical/GYN	DAYS
122 = OB	DAYS
123 = Pediatric	DAYS
124 = Psychiatric	DAYS
125 = Hospice	DAYS
126 = Detoxification	DAYS
127 = Oncology	DAYS
128 = Rehabilitation	DAYS

129 = Other	DAYS
-------------	------

ROOM AND BOARD, SEMI PRIVATE THREE AND FOUR BEDS

130 = General Classification	DAYS
131 = Medical/Surgical/GYN	DAYS
132 = OB	DAYS
133 = Pediatric	DAYS
134 = Psychiatric	DAYS
135 = Hospice	DAYS
136 = Detoxification	DAYS
137 = Oncology	DAYS
138 = Rehabilitation	DAYS
139 = Other	DAYS

PRIVATE (DELUXE)

140 = General Classification	DAYS
141 = Medical/Surgical/GYN	DAYS
142 = OB	DAYS
143 = Pediatric	DAYS
144 = Psychiatric	DAYS
145 = Hospice	DAYS
146 = Detoxification	DAYS
147 = Oncology	DAYS
148 = Rehabilitation	DAYS
213 = Heart Transplant	DAYS
214 = Post CCU	DAYS
219 = Other Coronary Care	DAYS

SPECIAL CHARGES

220 = General Classification	
221 = Admission Charge	
222 = Technical Support Charge	
223 = U.R. Service Charge	

224 = Late Discharge, Medically Necessary

229 = Other Special Charges

INCREMENTAL NURSING CHARGE RATE

230 = General Classification

231 = Nursery

232 = OB

233 = ICU - Includes Transitional Care

234 = CCU - Includes Transitional Care

235 = Hospice

239 = Other Coronary Care

ALL INCLUSIVE ANCILLARY

240 = General Classification

249 = Other Inclusive Ancillary

PHARMACY

250 = General Classification

251 = Generic Drug

252 = Non-Generic Drug

253 = Take Home Drug

254 = Drugs Incident to Other Diag. Srvs.

255 = Drugs Incident to Radiology

256 = Experimental Drugs

257 = Non-Prescription.

258 = IV Solutions

259 = Other Drugs

IV THERAPY (HOME IV THERAPY)

260 = General Classification

261 = Infusion Pump

262 = IV Therapy/Pharmacy Services

263 = IV Therapy/Drug/Supply Delivery

264 =	IV	Therapy	/Supp	olies
-------	----	---------	-------	-------

RADIOLOGY - THERAPEUTIC

330 = General Classification
331 = Chemotherapy - Injected
332 = Chemotherapy - Oral
333 = Radiation Therapy
335 = Chemotherapy - IV
339 = Other

NUCLEAR MEDICINE

340 = General Classification
341 = Diagnostic
342 = Therapeutic - Oral
349 = Other

CT SCAN

350 = General Classifications	# Scans
351 = Head Scan	# Scans
352 = Body Scan	# Scans
359 = Other CT Scan	# Scans

OPERATING ROOM SERVICES

360 = General Classification
361 = Minor Surgery
362 = Organ Transplant - Other than Kidney
302 - Organ Transplant - Other than Numey
367 = Kidney Transplant
369 = Other Operating Room Services

<u>ANESTHESIA</u>

370 = General Classification	
371 = Anesthesia Incident to Radiology	
372 = Anesthesia Incident to Other Diag. Srvs.	

374 = Acupuncture	
379 = Other Anesthesia	

BLOOD

380 = General Classification
381 = Packed Red Cells
382 = Whole Blood
383 = Plasma
384 = Platelets
385 = Leucocytes
386 = Other Components
387 = Other Derivatives (cryopricipitates)
389 = Other Blood

BLOOD STORAGE AND PROCESSING

390 = General Classification
391 = Blood Administration
399 = Other Blood Storage and Processing

OTHER IMAGING SERVICES

480 = General Classification	
481 = Cardiac Catheterization Lab	
482 = Stress Test	
489 = Other Cardiology	

AMBULATORY SURGICAL CARE

490 = General Classification
499 = Other Ambulatory Surgical Care

OUTPATIENT SERVICES

500 = General Classification	
509 = Other	

CLINIC

510 = General Classification	
511 = Chronic Pain Center	
512 = Dental Clinic	
513 = Diabetic Counseling	
514 = OB-GYN Clinic	
515 = Pediatric Clinic	
519 = Other Clinic	

FREESTANDING CLINIC

520 = General Classification	
521 = Rural Health Clinic	
522 = Rural Home Health	
523 = Family Practice	
529 = Other Clinic	

OSTEOPATHIC SERVICES

530 = General Classification
531 = Osteopathic Therapy
539 = Other Osteopathic Services

AMBULANCE

540 = General Classification	# Miles
541 = Supplies	# Miles
542 = Medical Transport	# Miles
543 = Heart Mobile	# Miles
544 = Oxygen	# Miles
545 = Air Ambulance	# Miles
546 = NeoNatal Amb, Support Crews	# Miles
547 = Pharmacy	
548 = EKG (Telephonic Transmission)	
549 = Other Ambulance	# Miles

SKILLED NURSING

550 = General Classification	DAYS
551 = Visit Charge	DAYS

CAST ROOM

700 = General Classification
702 = Other Cast Room

RECOVERY ROOM

710 = General Classification	
712 = Other Recovery Room	

LABOR ROOM/DELIVERY

720 = General Classification	DAYS
721 = Labor	HOURS/DAYS
722 = Delivery	HOURS/DAYS
723 = Circumcision	
724 = Birthing Center	HOURS/DAYS
729 = Other Labor Room/Delivery	DAYS

EKG/ECG (ELECTROCARDIOGRAM)

730 = General Classification
731 = Holter Monitor
732 = Telemetry
739 = Other EKG/ECG

EEG (ELECTROENCEPHALOGRAM)

740 = General Classification	
749 = Other EEG	

GASTRO-INTESTINAL SERVICES

750 = General Classification	
------------------------------	--

759 = Other Gastro-Intestinal Services

TREATMENT OR OBSERVATION ROOM

760 = General Classification	
769 = Other Treatment Room	

LITHOTRIPSY

790 = General Classification	
799 = Other Lithotripsy	

INPATIENT RENAL DIALYSIS

800 = General Classification	# Sessions
801 = Inpatient Hemodialysis	# Sessions
802 = Inpatient Peritoneal (NON-CAPD)	# Sessions
803 = Inpatient (CAPD)	# Sessions
804 = Inpatient Continuous Cycling Peritoneal	# Sessions
809 = Other Inpatient Dialysis	# Sessions

ORGAN ACQUISITION

810 = General Classification	
811 = Living Donor - Kidney	
943 = Cardiac Rehabilitation	# Visits
944 = Drug Rehabilitation	# Visits
945 = Alcohol Rehabilitation	# Visits
946 = Air Fluidize Support Beds	Days
947 = Complex Medical Equipment	Days
948 = Occupational Therapy	# Visits
949 = Other Therapeutic Services	# Visits

PATIENT CONVENIENCE ITEMS

990 = General Classification
991 = Cafeteria/Guest Tray
992 = Private Linen Service

993 = Telephone/Telegraph
994 = TV/Radio
995 = Nonpatient Room Rentals
996 = Late Discharge Charge
997 = Admission Kits
998 = Beauty Shop/Barber
999 = Other Patient Convenience Items
851 = Peritoneal/Composite or Other Rate
852 = Home Supplies
853 = Home Equipment
854 = Maintenance/100%
855 = Support Services
859 = Other Outpatient CCPD

PROFESSIONAL FEES

960 = General Classification
961 = Psychiatric
962 = Ophthalmology
963 = Anesthesiologist (MD)
964 = Anesthetist (CRNA)
969 = Other Professional Fees
971 = Laboratory
972 = Radiology - Diagnostic
973 = Radiology - Therapeutic
974 = Radiology - Nuclear Medicine
975 = Operating Room
976 = Respiratory Therapy
977 = Physical Therapy
978 = Occupational Therapy
979 = Speech Pathology
981 = Emergency Room
982 = Outpatient Service
983 = Clinic
984 = Medical Social Services

985 = EKG
986 = EEG
987 = Hospital Visit
988 = Consultation
989 = Private Duty Nurse

West Virginia

Detailed charges (CHGn) are associated with identified revenue centers (REVCDn) and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 and the units of service specified in UNIT1. West Virginia reports detailed charges (CHGn) associated with standard UB-92 revenue codes stored in REVCDn. West Virginia does not collapse or redefine ranges of revenue codes.

The first 12 variables in each array (CHG1-CHG12, REVCD1-REVCD12, and UNIT1-UNIT12) are reserved for room and board services; the remaining variables are used for ancillary services.

SEQ_SID - HCUP SID sequence number

General Notes

The unique HCUP record number assigned to each discharge varies by year.

- In the 1988-1993 data, the data element SEQ is on all HCUP databases.
- In the 1994-1997 data,
 - o SEQ is only on the NIS.
 - o SEQ_SID is on the HCUP inpatient databases (SID and NIS), and
 - SEQ_ASD is on the HCUP outpatient databases.
- Beginning in the 1998 data, the data element KEY is used on all HCUP databases.

	Uniform Values		
Variable	Description	Value	Value Description
SEQ_SID	HCUP SID sequence number	13(n)	Record sequence number in SID

State Specific Notes

None

SEX - Sex of the patient

General Notes

The sex of the patient (SEX) is provided by the data source. All non-male, no-female (e.g., "other") values are set to missing (.).

If SEX is inconsistent with diagnoses (DE1nn) or procedures (DE2nn), SEX is set to inconsistent (.C).

Beginning in 1998, this information is retained in the data element FEMALE.

Uniform Values			
Variable	Description	Value	Value Description
SEX	X Sex of the	1	Male
patient	2	Female	
	•	Missing	
		.A	Invalid
	.B	Unavailable from source (coded in 1988-1997 data only)	
		.C	Inconsistent: ED1nn, ED2nn

State Specific Notes

Colorado

According to the documentation available from the source, "Other/Unknown" includes patients undergoing sex changes, undetermined sex, live births with congenital abnormalities, and patients whose sex was unavailable from any source document.

The source value for "Other/Unknown" was recoded to missing (.), during HCUP processing of 1988 1992 discharges. Beginning in 1993, "Other/Unknown" was recoded to invalid (.A) during HCUP processing.

Florida

Beginning in 1997, Florida reports an "Other" sex category. These values are included under missing (.).

SURGID_S - Synthetic primary surgeon number

General Notes

For HCUP data from 2001 to 2002, this data element is called MDNUM2_S. Beginning in 2003, this data element is called MDNUM2_R.

SURGID_S contains a fixed-key (one-to-one) encryption of the supplied primary surgeon number (SURGID), according to the following rules:

- All alphanumeric digits are used in the encryption.
- All symbols such as ".,:;'*@" are retained in the encrypted value, but not in the same location.
- Leading zeros are encrypted so that the two original physician identifiers "000A6" and "A6" are distinctly different.
- When the original attending physician and primary surgeon identifiers are the same, the synthetic identifiers, MDID_S and SURGID_S, are the same.
- When the SURGID in the ambulatory surgery data and the inpatient data are the same, the synthetic identifier, SURGID_S is the same.

Except in those data sources where physician license numbers are supplied, it is not known whether the physician identifier SURGID_S refers to individual physicians or to groups. If the primary surgeon numbers supplied by the data source are not restricted to license numbers, the state-specific note includes available information about reporting practices, including whether SURGID_S refers to individual physicians or to groups.

Beginning in the 1993 data, supplied physician identifiers were checked for null characters. If null characters were found, they were replaced by blanks before the identifier was encrypted. Since this conversion was not done in prior years of HCUP data, the encrypted physician identifiers from 1993 on may not match those in earlier years. However, null characters are rarely included.

Uniform Values			
Variable	Description	Value	Value Description
11-	S Synthetic primary surgeon number	16(a)	Synthetic physician identifier
		Blank	Missing

State Specific Notes

Arizona

The identification number for primary surgeons (SURGID_S) may not accurately track physicians across hospitals for the following reasons:

- Some hospitals assign their own internal other physician identification numbers rather than using the license numbers issued by the licensing agency of the physician or other health care practitioner. Information was not available about the prevalence of this practice.
- Some hospitals use one identification number for several physicians that are part
 of the same physician practice group. Information was not available about the
 prevalence of this practice.

Arizona's identification number for primary surgeons includes license numbers from the following board of examiners: Medical, Osteopathic, Podiatrists, and Nurses. In addition, Arizona accepts licensing numbers from other health practitioner licensing boards, but these boards are unspecified.

Colorado

The primary surgeon number (SURGID_S) may not accurately track physicians across hospitals. The state encourages hospitals to use the Professional State License Number as an identifier, but some hospitals continue to use their own internal identification number. Also, some hospitals appear to pad the Professional State License Number (a 5-digit code). Information was not available from the data source about the prevalence of these practices.

Some hospitals may use one license number for all physicians in order to protect physician confidentiality. Information was not available about the prevalence of this practice.

Florida

Florida reports state license numbers for the operating physician identifiers. During HCUP processing, physician identifiers were encrypted (SURGID_S).

Iowa

Beginning in 1994, Iowa reports a principal physician ID (SURGID_S) in addition to the attending physician ID (MDID_S).

lowa reports Universal Physician Identification Numbers (UPINs) as physician identification numbers.

Kentucky

The encrypted identifier for the physician performing the principal procedure (SURGID_S) may not accurately track physicians across hospitals. Kentucky collects two different types of physician identifiers, Universal Physician Identification Numbers (UPINs) and state license numbers.

Maryland

Maryland reports a state license number assigned by the Medical Chirurgical Faculty of Maryland (MED CHI) for the operating physician. Source documentation describes strict assignment and verification rules for this field.

Michigan

Michigan reports hospital-specific physician identifiers for the surgeon. Coding of physician identifiers are not consistent across hospitals. During HCUP processing, physician identifiers were encrypted (SURGID_S).

New Jersey

The coding of primary surgeon identification number (SURGID_S) varies across years:

Year	Physician Identifier		
1988-93	New Jersey state license numbers		
1994-95	Universal Physician Identification Numbers (UPINs)		
Beginning in 1996	New Jersey state license numbers.		

New York

New York reports state license numbers as physician identifiers. Source documentation indicates that if the operating physician did not possess a valid New York state license number, the license number of the operating physician or Chief of Service should have been reported.

New York does not limit this field to physicians; dentists, podiatrists, psychologists, nurse/midwifes, and other licensed health care professionals may be included. It is impossible to identify the different types of providers in the HCUP data.

Source physician identifiers are encrypted during HCUP processing.

Beginning in the 1998 data, physician identifiers are missing (" ") on discharges with an indication of an induced abortion. New York identifies an indication of induced abortion by ICD-9-CM diagnosis or procedure code:

- An admitting, principal, or secondary diagnosis of "6350" through "6399", or "7796".
- A principal or secondary procedure of "690", "695", "696", "6993", "738", "7491", "750", "751", or "9649".

Please note that the admitting diagnosis is not retained in the HCUP databases.

North Carolina

North Carolina provides the Universal Physician Identification Number (UPINs) for the 1st other physician. During HCUP processing, this identifier is encrypted.

Washington

Washington reports this identifier as "Other Physician ID" which can refer to any physician who performs the procedure, not just a surgeon.

The Washington physician identifiers may not accurately track physicians across hospitals. Washington collects several different types of physician identifiers, depending on the type of identifier provided by the hospitals. Hospitals provide Medicaid, Universal Physician Identification Numbers (UPINs), and DOH/HPQAD license numbers as physician identifiers. During HCUP processing, physician identifiers were re-encrypted (SURGID_S).

West Virginia

The encrypted other physician identifier (SURGID_S) may not accurately track physicians across patients and hospitals. West Virginia collects different types of physician identifiers depending on the payer:

- The Universal Physician Identification Numbers (UPINs) are coded on Medicare patients.
- A West Virginia Medicaid physician identifier is coded on Medicaid patients. The same physician treating two different Medicaid patients can have two different physician identifiers. One identifier is used for new Medicaid patients; the other identifier is used for established Medicaid patients.
- The physician's state license number is coded on most commercial patients. Some hospitals use their own physician identifiers and do not provide the UPIN, Medicaid and state license numbers.

SURGSPEC - Primary surgeon specialty, as received from source

General Notes

Beginning in 2001, this data element is called MDSPEC2.

The primary surgeon's specialty (SURGSPEC) is retained as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

Uniform Values			
Variable	Description	Value	Value Description
	Primary surgeon specialty, as received from source	n(a)	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

Maine

In Maine, SURGSPEC is coded as follows:

SURGSPEC			
<u>Value</u>	<u>Description</u>		
01	Emergency Medicine		
02	Preventative Medicine		
03	Occupational Medicine		
04	Public Health/Epidemiology		
05	Oncology		
06	General Practice		
07	Alcohol Rehab		
08	Infectious Diseases		

09	Geriatrics			
10	Allergy			
11	Dermatology			
12	Cardiology			
13	Pulmonary/Respiratory			
14	Physical Med/Rehab			
15	DO Radiology			
16	Not Used			
17	DO Pathology			
18	DO Anesthesiology			
19	DO General Practice			
20	Internal Medicine			
21	Endocrinology			
22	Gastroenterology			
23	Nephrology			
24	Urology			
25	Hematology			
26	Psychiatry			
27	Proctology			
28	Rheumatology			
29	DO Dermatology			
30	Not Used			
31	Neurology			
32	Ophthamology			
33	Otolaryngology			
34	Nurse Anesthesist			
35	Physicians Assistant			
36	Optometrist			
37	Genetics			
38	Registered Nurse			
39	Not Used			
40	Radiology			
41	Not Used			
42	Not Used			
43	Pathology			

44	Not Used			
45	Anesthesiology			
46	Radiation Oncology			
47	Not Used			
48	Not Used			
49	Not Used			
50	Obstetrics & Gynecology			
51	Pediatrics			
52	Not Used			
53	Pediatric Cardiology			
54	Neonatology			
55	Hospital Resident (D.O.)			
56	Hospital Resident (M.D.)			
57	DO Oncology/Hematology			
58	Pediatric Neurology			
59	Pediatric Oncology/Hematology			
60	General Surgery			
61	Orthopaedic Surgery			
62	Plastic Surgery			
63	Thoracic Surgery			
64	Neurological Surgery			
65	Not Used			
66	Not Used			
67	Not Used			
68	Not Used			
69	Unknown			
70	General Dentistry			
71	Podiatry			
72	Oral Surgery			
73	Not Used			
74	Not Used			
75	Not Used			
76	Not Used			
77	Not Used			
78	DO Gastroenterology			

79	DO Cardiology		
80	DO Family Practice		
81	DO Emergency Medicine		
82	DO Physical Med/Rehab		
83	DO Internal Medicine		
84	DO Urology		
85	DO Proctology		
86	DO Neurology		
87	DO Ophthamology		
88	DO Otolaryngology		
89	DO Psychiatry		
90	DO Obstetrics & Gynecology		
91	DO General Surgery		
92	DO Orthopaedic Surgery		
93	DO Plastic Surgery		
94	DO Thoracic Surgery		
95	DO Pediatrics		
96	Psychology		
97	Nurse Mid-Wife		
98	Surgical Assistant		
99	Family Practice		

South Carolina

South Carolina reports physician specialty as the area in which the physician spends the most hours per week, as reported at license renewal. If the physician does not report hours, South Carolina assigns physician specialty as the first practice type reported by the physician.

Physicians report their specialties to South Carolina using the categories and abbreviations in the "source-specific descriptions" column of the following table. South Carolina assigns them to three-character codes and reports the data in that format. During HCUP processing, the three-character codes supplied by the state were assigned to SURGSPEC.

In South Carolina, SURGSPEC is coded as follows. Any other codes are undefined.

Source Value	Description		
0AA	Pediatric Endocrinology (PDE)		
0AB	Internal Medicine/Diagnostic Laboratory Immunology (ILI)		
0AC	Internal Medicine, Geriatrics (IMG)		
0AD	Neurological Surgery, Critical Care (NCC)		
0AE	Pathology, Neuropathology (NP)		
0AF	Neurology, Pediatric Surgery (NSP)		
0AG	Orthopedic Surgery, Adult Reconstructive Orthopedics (OAR)		
0AH	Obstetrics & Gynecology/Critical Care Medicine (OCC)		
0AI	Orthopedic Surgery, Musculoskeletal Oncology (OMO)		
0AJ	Orthopedic Surgery, Pediatric Orthopedics (OP)		
0AK	Orthopedic Surgery, Sports Medicine (OSM)		
0AL	Orthopedic Surgery, Trauma (OTR)		
0AM	Pathology, Chemical (PCH)		
0AN	Pathology, Cytopathology (PCP)		
0AO	Pediatric Gastroenterology (PG) (code is zero-A-oh)		
0AP	Pathology, Immunopathology (PIP)		
0AQ	Pediatrics/Diagnostic Laboratory Immunology (PLI)		
0AT	Undersea Medicine (UM)		
0AU	Radiology, Vascular and Interventional (VIR)		
0AV	Addiction Medicine (ADM)		
0BB	Pathology, Radioisotopic (RIP)		
0BJ	Pediatric Otolaryngology		
0BL	Pain Medicine		
0BM	Pediatric Ophthalmology		
0BS	Obstetrics		
0CB	Cardiothoracic Surgery		
0CC	Surgery, Vascular (VS)		
0CE	Cardiac Electrophysiology		
0CJ	Pediatric Infectious Disease		
0DD	Neonatal Medicine (NEO)		
0EE	Pediatric Pulmonology (PDP)		
0FF	Radiation Oncology (RO)		

онн	Pediatric Emergency Medicine (PEM)			
OII	Medical Genetics (MG)			
0JJ	Psychiatry, Geriatric (PYG)			
0KK	Orthopedic Surgery, Spine Surgery (OSS)			
OLL	Allergy & Immunology/Diagnostic Laboratory Immunology (ALI)			
OMM	Anesthesiology, Pain Management (APM)			
000	Pathology, Blood Banking (BBK) (code is zero-oh-oh)			
0PP	Anesthesiology, Critical Care (CCA)			
0QQ	Pediatric Critical Care (CCP)			
0RR	Surgery, Critical Care (CCS)			
0SS	Neurology, Clinical Neurophysiology (CN)			
ОТТ	Dermatological Immunology/Diagnostic Laboratory Immunology (DDL)			
0UU	Family Practice, Geriatric Medicine (FPG)			
0VV	Family Practice, Sports Medicine (FSM)			
0WW	Pathology, Hematology (HMP)			
0XX	Orthopedic Surgery, Hand Surgery (HSO)			
0YY	Plastic Surgery, Hand Surgery (HSP)			
0ZZ	Internal Medicine Cardiac Electrophysiology (ICE)			
001	Aerospace Medicine (AM)			
002	Allergy & Immunology (AI)			
003	Anesthesiology (AN)			
005	Cardiovascular Disease (CD)			
006	Dermatology (D)			
007	Diabetes (DIA)			
800	Emergency Medicine (EM)			
009	Endocrinology (END)			
010	Family Practice (FP, FPP)			
011	Gastroenterology (GE)			
012	General Practice (GP), Dental Health Program (DHP), Intern			
013	General Preventative Medicine (GPM)			
014	Geriatrics (GER)			
015	Gynecology (GYN, G)			
016	Hematology (HEM)			

018	Infectious Diseases (ID)			
019	Internal Medicine (IM)			
021	Legal Medicine (LM)			
023	Nephrology (NEP)			
024	Neurology (N)			
025	Neurology, Child (CHN)			
026	Neuropathology (NA)			
027	Nuclear Medicine (NM)			
028	Nutrition (NTR)			
029	Obstetrics (OBS)			
030	Obstetrics & Gynecology (OBG)			
031	Occupational Medicine (OM)			
032	Ophthalmology (OPH)			
033	Otology (OT)			
034	(OTL)			
035	Pathology, Anatomic/Clinical (PTH)			
036	Pathology, Clinical (CLP)			
037	Pathology, Forensic (FOP)			
038	Pediatrics (PD)			
039	Pediatric Allergy (PDA)			
040	Pediatric Cardiology (PDC)			
041	Pharmacology, Clinical (PA)			
042	Physical Medicine & Rehabilitation (PM)			
043	Psychiatry (P)			
044	Psychiatry, Child (CHP)			
045	Psychoanalysis (PYA)			
047	Public Health (PH)			
048	Pulmonary Disease (PUD)			
049	Radiology (R)			
050	Radiology, Diagnostic (DR)			
051	Radiology, Pediatric (PDR)			
052	Therapeutic Radiology (TR)			
053	Rheumatology (RHU)			
056	Abdominal Surgery (ABS)			
057	Surgery, Cardiovascular (CDS)			

058	Surgery, Colon & Rectal (CRS)			
059	Surgery, General (GS)			
	Surgery, Hand (HS)			
060				
061	Surgery, Head & Neck (HNS)			
062	Surgery, Neurological (NS)			
063	Surgery, Orthopedic (ORS)			
064	Surgery, Pediatric (PDS)			
065	Surgery, Plastic (PS)			
066	Surgery, Thoracic (TS)			
067	Surgery, Traumatic (TRS)			
068	Surgery, Urological (U)			
069	1993: Nuclear Radiology (NR)			
	1994: Nuclear Radiology (OTHER)			
071	Immunology (IG)			
073	Oncology Medical (ON)			
074	Otolaryngology (OTO)			
080	Administrative Medicine (ADM)			
081	Student Health (SH)			
082	Pediatric Hematology-Oncology (PHO)			
083	Pediatric Nephrology (PN, PNP)			
084	Neonatal-Perinatal Medicine (NPM)			
085	Pathology, Anatomic (ATP)			
086	Gynecological Oncology (GO, ONC)			
087	Maternal & Fetal Medicine (MFM)			
088	Reproductive Endocrinology (REN, RE)			
089	Allergy (A)			
090	Adolescent Medicine (ADL)			
091	Blood Banking (BLB)			
092	Critical Care Medicine (CCM)			
093	Chemical Pathology (CMP)			
094	Diagnostic Lab Immunology (DLI)			
095	Dermatopathology (DMP)			
096	Facial Plastic Surgery, Otolaryngology (FPS)			
097	Immunopathology (SID and NIS)			
098	Medical Microbiology (MM)			
	н ,			

099	Nuclear Radiology (NR)		
103	General Practice, Dentist (GP-DENT)		
108	Oral Surgery (OS-DENT)		
110	Periodontics Dentist (PERIO-DENT)		

South Carolina data do not separately classify some physician specialties. No documentation was available describing which physician specialties were used for:

- U.S. Air Force (AF)
- Pathology, Pediatric Pathology (PP)
- U.S. Navy (USN)
- U.S. Army (USA)
- Osteopathy (OST)
- U.S. Public Health Service (PHS)

TMDXn - Diagnosis present at admission

General Notes

TMDXn indicates whether each diagnosis (DXn) was present at admission. This provides an indicator of complications arising during a hospitalization. If there is a time of onset for which no diagnosis code is present, TMDXn is set to missing (.).

Beginning in the 1998 data, this data element is called DXatAdmitn.

Uniform Values			
Variable	Description	Value	Value Description
TMDXn	Diagnosis present at admission	0	Diagnosis not present at admission
		1	Diagnosis present at admission
		•	Missing or diagnosis is an E-code
			.A

State Specific Notes

New York

TMDX1 was not supplied by New York, because the principal diagnosis was, by definition, present at the time of admission. Therefore, TMDX1 was imputed to a value of one for all records.

TMDXn for E-codes were not reported by New York and were set to missing (.) during HCUP processing.

TOTCHG - Total charges, cleaned

General Notes

TOTCHG contains the edited total charges. The original value provided by the data source is retained in the data element TOTCHG_X. How total charges are edited depends on the year of the data.

In the 1988-1997 HCUP databases, the following edits are applied to total charges (TOTCHG):

- Values are rounded to the nearest dollar; and
- Zero charges are set to missing (.);
- Negative charges are set to invalid (.A); and
- For HCUP inpatient databases, if charges per day (TOTCHG/LOS) are unjustifiably low (ED911) or high (ED921), then TOTCHG is set to inconsistent (.C).
- For HCUP outpatient databases, if total charges are excessively low (ED912) or high (ED922), then TOTCHG is set to inconsistent (.C). (SASD)

Beginning in the 1998 HCUP databases, the following edits are applied to total charges (TOTCHG):

- Values are rounded to the nearest dollar; and
- Zero charges are set to missing (.);
- If total charges are excessively low (ETCHG01) or high (ETCHG02), then TOTCHG is set to inconsistent (.C). The limits for excessively low and high total charges vary for inpatient and outpatient databases.

Generally, total charges (TOTCHG and TOTCHG_X) do not include professional fees and non-covered charges. If the source provides total charges with professional fees, then the professional fees are removed from the charge during HCUP processing. In a small number of HCUP databases, professional fees can not be removed from total charges because the data source cannot provide the information. In these rare cases, the HCUP data element PROFEE, that identifies which records have professional fees included in the total charge, is included on the HCUP database.

Emergency department charges incurred prior to admission to the hospital may be included in total charges (TOTCHG and TOTCHG_X). Medicare requires a bundled bill for Medicare patients admitted to the hospital through the emergency department. Other payers may or may not have similar requirements.

Uniform Values			
Variable	Description	Value	Value Description
TOTCHG	Total charges, cleaned	25 - 1 million	Total Charge rounded (In the 1988-1997 data, TOTCHG can be less than 25 and greater than 1 million)
			Missing
		.A	Invalid
		.В	Unavailable from source (coded in 1988-1997 data only)
		.C	Inconsistent: beginning with 1998 data, ETCHG01, ETCHG02; in 1998-1997 data, ED911, ED912, ED921, ED922

State Specific Notes

Arizona

Beginning in 1996, Arizona included charges for professional fees and patient convenience items in its total charges (CHG59, CHG60, CHG61 and CHG62). Any charges for professional fees and convenience items were subtracted from the reported total charges during HCUP processing to make Arizona total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

Due to an error in HCUP processing in 1996, some types of professional fees were not subtracted from total charges (TOTCHG and TOTCHG_X). The types of professional fees that were not subtracted include hospital visits, consultations, private duty nurses, EKGs, EEGs, and medical social services. Charges for these services were coded on 24% of the 1996 discharges, with a mean charge of \$216 and a range from \$1 to \$5,718. Total charges (TOTCHG and TOTCHG_X) can be corrected by subtracting the detail charge, CHG61. No other years need correction.

Beginning in 1997, all reported professional fees and patient convenience items were subtracted from total charges (TOTCHG and TOTCHG_X).

Arizona

In 1996 only, total charges (TOTCHG and TOTCHG_X) can be corrected by subtracting the detail charge, CHG61. No other years need correction.

California

California supplied total charges only for the last 365 days of the stay for stays of more than one year (365 days). If the supplied length of stay was greater than 365 days, cleaned total charges, TOTCHG, was set to missing (.) and uncleaned total charges, TOTCHG_X, retained the supplied total charge. Due to an error in HCUP processing, cleaned total charges, TOTCHG, were not set to missing in the 1998-1999 HCUP files.

Some hospitals in California (including all Kaiser and Shriner hospitals) were exempted from reporting total charges. For those hospitals, TOTCHG and TOTCHG_X were missing (.).

Source documentation indicated that hospital-based physician fees were not included in the reported total charges.

No Charges

The source reported total charges with the value of 1 for discharges with no charges (\$0). These records include live donors and courtesy or research patients. Values of 1 were verified with the hospital by the source.

Prior to 1995, total charges were set to missing (TOTCHG and TOTCHG_X = .) for these records during HCUP processing. Beginning in 1995, only TOTCHG was set to missing (.) and TOTCHG_X retained the value of 1. Due to an error in HCUP processing, cleaned total charges, TOTCHG, were not set to missing in the 1998-1999 HCUP files.

Colorado

According to Colorado, hospital based physician fees are excluded from total charges (TOTCHG and TOTCHG_X).

Iowa

Beginning in 1993, lowa includes professional fees in its total charges if the hospital combines hospital and professional bills. Professional fees are subtracted from total charges (TOTCHG and TOTCHG_X) during HCUP processing to make lowa total charges comparable to data from other states.

Prior to 1993, it was optional for hospitals to report total charges to the hospital association:

- The availability of total charges varies by hospital.
- Some hospitals have missing (.) total charges (TOTCHG and TOTCHG_X) on a large percentage of records.

Maine

Professional charges were subtracted from the supplied total charge during HCUP processing to make Maine total charges (TOTCHG) comparable to data from other states.

Maryland

Maryland excluded the following from total charges:

- Physician charges and
- Charges not regulated by the Health Services Cost Review Commission (for example, telephone service, television charges or private duty nursing charges).

Massachusetts

Massachusetts included professional fees in its detailed and total charges, if these were included by the hospital. Hospitals are allowed, but not required, to report these professional fees in the charge fields. Individual facilities decide which professional fees are included and where. There is no way to determine which hospitals did or did not include professional fees.

Massachusetts

From 1988 to 1993, total charges (TOTCHG and TOTCHG_X) are the sum of detailed charges, excluding the "unknown revenue center" charge (CHG43).

Beginning in 1994, an "unknown revenue center" charge was not included in the detailed charges. Total charges (TOTCHG and TOTCHG_X) equal the sum of all supplied detailed charges.

Nevada

The total charges for Nevada are the charges reported for UB-92 revenue center "0001".

New York

For the 1988-1993 HCUP files, New York supplied their Master File which consists of Discharge Data Abstracts (DDA) matched to Uniform Billing Forms (UBF) for inpatient stays. Information on total charges is included in the UBF part of the record. Due to an administrative change in the collection of billing records for 1989, a large percentage of the DDAs could not be matched to a UBF. When there was no match, charge information is missing. The match rate improves over time and stabilizes after 1991. The percentage of DDA records that have a matching UBF record in the Master File is as follows:

1988	77.2%
1989	26.3%
1990	62.8%
1991	93.7%
1992	91.8%
1993	95.5%.

Beginning in the 1994 data, hospitals submitted discharge records to New York in a new format, using Universal Data Set (UDS) specifications. This format combines the old UBF and DDA data into a single submission record.

Adjustment to Charges for Interim Bills

- For 1988-1993, when the length of stay from the Discharge Data Abstract did not equal the length of the billing period from the Uniform Billing Form, total charges (TOTCHG) were set to missing (.) because this billing information pertained only to the billing period, not the complete inpatient stay. However, TOTCHG_X contains the original value from the billing record.
- Beginning in 1994, billing dates were not reported by New York and the adjustment to charge details (CHGn, RATEn, UNITn, REVCDn) was not made.

Oregon

Kaiser hospitals are exempt from reporting total charges. As a result, TOTCHG and TOTCHG_X are missing (.) for Kaiser Hospitals in Oregon.

Beginning in the 1995 data, some hospitals did not report total charges (TOTCHG and TOTCHG_X) on charity bills since there are no charges to the patient.

Rhode Island

Charges for patient convenience items were subtracted from the reported total charges during HCUP processing to make Rhode Island total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

South Carolina

Beginning in 1996, professional fees and charges for patient convenience items were subtracted from the reported total charges during HCUP processing to make South Carolina total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

Prior to 1996, only professional fees were subtracted from the reported total charges because the source did not supply an itemized charge for patient convenience items.

Utah

Beginning in 2002, professional fees were subtracted from the reported total charges during HCUP processing to make Utah total charges (TOTCHG and TOTCHG_X) comparable to data from other states. Utah indicates that for the majority of the discharges, the reported total charge includes professional fees. Utah reports the total charge for the UB-92 revenue code "001" if the hospital provides individual revenue codes to the data organization; otherwise the total charge is the hospital-reported total. For the hospitals that do not provide individual revenue codes, Utah does not have any means of determining whether or not professional charges are included. Prior to 2002, professional fees were not subtracted from the total charges (TOTCHG and TOTCHG_X). To make the total charges comparable to data from other states, professional fees (CHG2) should be subtracted from total charges (TOTCHG and TOTCHG_X).

West Virginia

West Virginia has rate setting. The data source confirms that the all covered charges are included in the total charge (TOTCHG).

Wisconsin

Wisconsin may have included professional fees and convenience items in its total charges. Hospitals are instructed to remove these fees from total charges, but some hospitals do not subtract them and others have had difficulties with their accounting software. There is no way to determine which hospitals did or did not include these items.

Hospitals are not required to report total charges for stays over 100 days.

Wisconsin

An error during HCUP processing of 1993 discharges caused negative values of total charges (TOTCHG) to be set to missing (.) instead of invalid (.A). For other years, negative values of TOTCHG were processed correctly.

TOTCHG_X - Total charges, as received from data source

General Notes

TOTCHG_X retains the total charge supplied by a data source, including cents and negative values, with the following exceptions:

- Zero charges are set to missing (.); and
- Charges that round to zero are set to missing (.).

TOTCHG_X has the same value as TOTCHG just before edit checks on total charges are performed. TOTCHG contains the cleaned total charges. TOTCHG_X contains the original value of total charges.

Generally, total charges (TOTCHG and TOTCHG_X) do not include professional fees and non-covered charges. If the source provides total charges with professional fees, then the professional fees are removed from the charge during HCUP processing. In a small number of HCUP databases, professional fees can not be removed from total charges because the data source cannot provide the information. In these rare cases, the HCUP data element PROFEE, that identifies which records have professional fees included in the total charge, is included on the HCUP database.

In some cases, only copay amounts, such as \$10 or \$20, may be in the total charges. There is no documentation as to the prevalence of this practice.

Emergency department charges incurred prior to admission to the hospital may be included in total charges (TOTCHG and TOTCHG_X). Medicare requires a bundled bill for Medicare patients admitted to the hospital through the emergency department. Other payers may or may not have similar requirements.

Uniform Values			
Variable	Description	Value	Value Description
TOTCHG_X Total charges, as received from data source	+/- 100 million	Total charge (with 2 decimal places)	
	•	Missing	
	.A	Invalid (nonnumeric or out of range)	

State Specific Notes

Arizona

Beginning in 1996, Arizona included charges for professional fees and patient convenience items in its total charges (CHG59, CHG60, CHG61 and CHG62). Any charges for professional fees and convenience items were subtracted from the reported total charges during HCUP processing to make Arizona total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

Due to an error in HCUP processing in 1996, some types of professional fees were not subtracted from total charges (TOTCHG and TOTCHG_X). The types of professional fees that were not subtracted include hospital visits, consultations, private duty nurses, EKGs, EEGs, and medical social services. Charges for these services were coded on 24% of the 1996 discharges, with a mean charge of \$216 and a range from \$1 to \$5,718. Total charges (TOTCHG and TOTCHG_X) can be corrected by subtracting the detail charge, CHG61. No other years need correction.

Beginning in 1997, all reported professional fees and patient convenience items were subtracted from total charges (TOTCHG and TOTCHG_X).

Arizona

In 1996 only, total charges (TOTCHG and TOTCHG_X) can be corrected by subtracting the detail charge, CHG61. No other years need correction.

California

California supplied total charges only for the last 365 days of the stay for stays of more than one year (365 days). If the supplied length of stay was greater than 365 days,

- cleaned total charges, TOTCHG, was set to missing (.) and
- uncleaned total charges, TOTCHG_X, retained the supplied total charge.

Some hospitals in California (including all Kaiser and Shriner hospitals) were exempted from reporting total charges. For those hospitals, TOTCHG and TOTCHG_X were missing (.).

Source documentation indicated that hospital-based physician fees were not included in the reported total charges.

No Charges

The source reported total charges with the value of 1 for discharges with no charges (\$0). These records include live donors and courtesy or research patients. Values of 1 were verified with the hospital by the source.

Prior to 1995, total charges were set to missing (TOTCHG and TOTCHG_X = .) for these records during HCUP processing. Beginning in 1995, only TOTCHG was set to missing (.) and TOTCHG X retained the value of 1.

Colorado

According to Colorado, hospital based physician fees are excluded from total charges (TOTCHG and TOTCHG_X).

Iowa

Beginning in 1993, Iowa includes professional fees in its total charges if the hospital combines hospital and professional bills. Professional fees are subtracted from total charges (TOTCHG and TOTCHG_X) during HCUP processing to make Iowa total charges comparable to data from other states.

Prior to 1993, it was optional for hospitals to report total charges to the hospital association:

- The availability of total charges varies by hospital.
- Some hospitals have missing (.) total charges (TOTCHG and TOTCHG_X) on a large percentage of records.

Maine

Professional charges were subtracted from the supplied total charge during HCUP processing to make Maine total charges (TOTCHG_X) comparable to data from other states.

Maryland

Maryland excluded the following from total charges:

- Physician charges and
- Charges not regulated by the Health Services Cost Review Commission (for example, telephone service, television charges or private duty nursing charges).

Massachusetts

Massachusetts included professional fees in its detailed and total charges, if these were included by the hospital. Hospitals are allowed, though not required, to report these professional fees in the charge fields. Individual facilities decide which professional fees are included and where. There is no way to determine which hospitals did or did not include professional fees.

Massachusetts

From 1988 to 1993, total charges (TOTCHG and TOTCHG_X) are the sum of detailed charges, excluding the "unknown revenue center" charge (CHG43).

Beginning in 1994, an "unknown revenue center" charge was not included in the detailed charges. Total charges (TOTCHG and TOTCHG_X) equal the sum of all supplied detailed charges.

Michigan

Michigan provides Total Charges beginning in 2001.

Nevada

The total charges for Nevada are the charges reported for UB-92 revenue center "0001".

New York

For the 1988-1993 HCUP files, New York supplied their Master File which consists of Discharge Data Abstracts (DDA) matched to Uniform Billing Forms (UBF) for inpatient stays. Information on total charges is included in the UBF part of the record. Due to an administrative change in the collection of billing records for 1989, a large percentage of the DDAs could not be matched to a UBF. When there was no match, charge information is missing. The match rate improves over time and stabilizes after 1991. The percentage of DDA records that have a matching UBF record in the Master File is as follows:

1988	77.2%
1989	26.3%
1990	62.8%
1991	93.7%
1992	91.8%
1993	95.5%.

Beginning in the 1994 data, hospitals submitted discharge records to New York in a new format, using Universal Data Set (UDS) specifications. This format combines the old UBF and DDA data into a single submission record.

Adjustment to Charges for Interim Bills

• For 1988-1993, when the length of stay from the Discharge Data Abstract did not equal the length of the billing period from the Uniform Billing Form, total charges

- (TOTCHG) were set to missing (.) because this billing information pertained only to the billing period, not the complete inpatient stay. However, TOTCHG_X contains the original value from the billing record.
- Beginning in 1994, billing dates were not reported by New York and the adjustment to charge details (CHGn, RATEn, UNITn, REVCDn) was not made.

Oregon

Kaiser hospitals are exempt from reporting total charges. As a result, TOTCHG and TOTCHG_X are missing (.) for Kaiser Hospitals in Oregon.

Beginning in the 1995 data, some hospitals did not report total charges (TOTCHG and TOTCHG_X) on charity bills since there are no charges to the patient.

Rhode Island

Charges for patient convenience items were subtracted from the reported total charges during HCUP processing to make Rhode Island total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

South Carolina

Beginning in 1996, professional fees and charges for patient convenience items were subtracted from the reported total charges during HCUP processing to make South Carolina total charges (TOTCHG and TOTCHG_X) comparable to data from other states.

Prior to 1996, only professional fees were subtracted from the reported total charges because the source did not supply an itemized charge for patient convenience items.

Utah

Beginning in 2002, professional fees were subtracted from the reported total charges during HCUP processing to make Utah total charges (TOTCHG and TOTCHG_X) comparable to data from other states. Utah indicates that for the majority of the discharges, the reported total charge includes professional fees. Utah reports the total charge for the UB-92 revenue code "001" if the hospital provides individual revenue codes to the data organization; otherwise the total charge is the hospital-reported total. For the hospitals that do not provide individual revenue codes, Utah does not have any means of determining whether or not professional charges are included. Prior to 2002, professional fees were not subtracted from the total charges (TOTCHG and TOTCHG_X). To make the total charges comparable to data from other states, professional fees (CHG2) should be subtracted from total charges (TOTCHG and TOTCHG_X).

West Virginia

West Virginia has rate setting. The data source confirms that the all covered charges are included in the total charge (TOTCHG_X).

Wisconsin

Wisconsin may have included professional fees and convenience items in its total charges. Hospitals are instructed to remove these fees from total charges, but some hospitals do not subtract them and others have had difficulties with their accounting software. There is no way to determine which hospitals did or did not include these items.

Hospitals are not required to report total charges for stays over 100 days.

Wisconsin

An error during HCUP processing of 1993 discharges caused negative values of total charges (TOTCHG_X) to be set to missing (.) instead of retained as reported by the data source. For other years, negative values of TOTCHG_X were processed correctly.

TOWN - Patient town of residence, as received from source

General Notes

Information on the town in which the patient resides (TOWN) is retained as provided by the data source. No edit checks are performed on this data element during HCUP processing.

Uniform Values			
Variable Description Value Value Description			
TOWN	Patient town of residence, as received from source	n/a	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

Nebraska

Nebraska provided the full name of the patient's town.

New Jersey

New Jersey		
Value of TOWN Description		
1 = Atlantic County		
101	Absecon City	
102	Atlantic City	
103	Brigantine City	
104	Buena Boro	
105	Buena Vista Twp.	
106	Corbin City	
107	Egg Harbor City	

108	Egg Harbor Twp.
109	Estell Manor City
110	Folsom Boro
111	Galloway Twp.
112	Hamilton Twp.
113	Hammonton Town
114	Linwood City
115	Longport Boro
116	Margate City
117	Mullica Twp.
118	Northfield City
119	Pleasantville City
120	Port Republic City
121	Somers Point City
122	Ventnor City
123	Weymouth Twp.
2 = Bergen Coun	ty
201	Allendale Boro
202	Alpine Boro
203	Bergenfield Boro
204	Bogota Boro
205	Carlstadt Boro
206	Cliffside Park Boro
207	Closter Boro
208	Cresskill Boro
209	Demarest Boro
210	Dumont Boro
211	Elmwood Park Boro
212	East Rutherford Boro
213	Edgewater Boro
214	Emerson Boro
215	Englewood City
216	Englewood Cliffs Boro
217	Fair Lawn Boro
218	Fairview Boro

219	Fort Lee Boro
220	Franklin Lakes Boro
221	Garfield City
222	Glen Rock Boro
223	Hackensack City
224	Harrington Park Boro
225	Hasbrouck Heights Boro
226	Haworth Boro
227	Hillsdale Boro
228	Hohokus Boro
229	Leonia Boro
230	Little Ferry Boro
231	Lodi Boro
232	Lyndhurst Twp.
233	Mahwah Twp.
234	Maywood Boro
235	Midland Park Boro
236	Montvale Boro
237	Moonachie Boro
238	New Milford Boro
239	North Arlington Boro
240	Northvale Boro
241	Norwood Boro
242	Oakland Boro
243	Old Tappan Boro
244	Oradell Boro
245	Palisade Park Boro
246	Paramus Boro
247	Park Ridge Boro
248	Ramsey Boro
249	Ridgefield Boro
250	Ridgefield Park Village
251	Ridgefield Village
252	River Edge Boro
253	River Vale Twp.

254	Rochelle Park Twp.
255	Rockleigh Boro
256	Rutherford Boro
257	Saddle Brook Twp.
258	Saddle River Boro
259	South Hackensack Twp.
260	Teaneck Twp.
261	Tenafly Boro
262	Teterboro Boro
263	Upper Saddle River Boro
264	Waldwick Boro
265	Wallington Boro
266	Washington Twp.
267	Westwood Boro
268	Woodcliff Lake Boro
269	Wood-Ridge Boro
270	Wyckoff Twp.
3 = Burlington County	
301	Bass River Twp.
302	Beverly City
303	Bordentown City
304	Bordentown Twp.
305	Burlington City
306	Burlington Twp.
307	Chesterfield Twp.
308	Cinnaminson Twp.
309	Delanco Twp.
310	Delran Twp.
311	Eastampton Twp.
312	Edgewater Park Twp.
313	Evesham Twp.
314	Fieldsboro Boro
315	Florence Twp.
316	Hainesport Twp.
317	Lumberton Twp.

318	Mansfield Twp.
319	Maple Shade Twp.
320	Medford Twp.
321	Medford Lakes Boro
322	Moorestown Twp.
323	Mount Holly Twp.
324	Mount Laurel Twp.
325	New Hanover Twp.
326	North Hanover Twp.
327	Palmyra Boro
328	Pemberton Boro
329	Pemberton Twp.
330	Riverside Twp.
331	Riverton Boro
332	Shamong Twp.
333	Southampton Twp.
334	Springfield Twp.
335	Tabernacle Twp.
336	Washington Twp.
337	Westampton Twp.
338	Willingboro Twp.
339	Woodland Twp.
340	Wrightstown Boro
4 = Camden Count	у
401	Audubon Boro
402	Audubon Park Boro
403	Barrington Boro
404	Bellmawr Boro
405	Berlin Boro
406	Berlin Twp.
407	Brooklawn Boro
408	Camden City
409	Cherry Hill Twp.
410	Chelsilhurst Boro
411	Clementon Boro

412	Collingswood Boro
413	Gibbsboro Boro
414	Gloucester City
415	Gloucester Twp.
416	Haddon Twp.
417	Haddonfield Boro
418	Haddon Heights Boro
419	Hi-Nella Boro
420	Laurel Springs Boro
421	Lawnside Boro
422	Lindenwold Boro
423	Magnolia Boro
424	Merchantville Boro
425	Mount Ephraim Boro
426	Oaklyn Boro
427	Pennsauken Twp.
428	Pine Hill Boro
429	Pine Valley Boro
430	Runnemede Boro
431	Somerdale Boro
432	Stratford Boro
433	Tavistock Boro
434	Voorhees Twp.
435	Waterford Twp.
436	Winslow Twp.
437	Woodlynne Boro
5 = Cape May County	
501	Avalon Boro
502	Cape May City
503	Cape May Point Boro
504	Dennis Twp.
505	Lower Twp.
506	Middle Twp.
507	North Wildwood City
508	Ocean City

509	Sea Isle City
510	Stone Harbor Boro
511	Upper Twp.
512	West Cape May Boro
513	West Wildwood Boro
514	Wildwood City
515	Wildwood Crest Boro
516	Woodbine Boro
6 = Cumberland (County
601	Bridgeton City
602	Commercial Twp.
603	Deerfield Twp.
604	Downe Twp.
605	Fairfield Twp.
606	Greenwich Twp.
607	Hopewell Twp.
608	Lawrence Twp.
609	Maurice River Twp.
610	Millville City
611	Shiloh Boro
612	Stow Creek Twp.
613	Upper Deerfield Twp.
614	Vineland City
7 = Essex County	
701	Belleville Twp.
702	Bloomfield Twp.
703	Caldwell Boro Twp.
704	Cedar Grove Twp.
705	East Orange City
706	Essex Fells Twp.
707	Fairfield Twp.
708	Glen Ridge Boro Twp.
709	Irvington Twp.
710	Livingston Twp.
711	Maplewood Twp.

712	Millburn Twp.
713	Montclair Twp.
714	Newark City
715	North Caldwell Boro
716	Nutley Twp.
717	City of Orange Twp.
718	Roseland Boro
719	South Orange Village Twp.
720	Verona Twp.
721	West Caldwell Twp.
722	West Orange Twp.
8 = Gloucester	County
801	Clayton Boro
802	Deptford Twp.
803	East Greenwich Twp.
804	Elk Twp.
805	Franklin Twp.
806	Glassboro Boro
807	Greenwich Twp.
808	Harrison Twp.
809	Logan Twp.
810	Mantua Twp.
811	Monroe Twp.
812	National Park Boro
813	Newfield Boro
814	Paulsboro Boro
815	Pitman Boro
816	South Harrison Twp.
817	Swedesboro Boro
818	Washington Twp.
819	Wenonah Boro
820	West Deptford Twp.
821	Westville Boro
822	Woodbury City
823	Woodbury Heights Boro

824	Woolwich Twp.
9 = Hudson Cou	nty
901	Bayonne City
902	East Newark Boro
903	Guttenberg Town
904	Harrison Town
905	Hoboken City
906	Jersey City
907	Kearny Town
908	North Bergen Twp.
909	Secaucus Town
910	Union City
911	Weehawken Twp.
912	West New York Town
10 = Hunterdon	County
1001	Alexandria Twp.
1002	Bethlehem Twp.
1003	Bloomsbury Boro
1004	Califon Boro
1005	Clinton Town
1006	Clinton Twp.
1007	Delaware Twp.
1008	East Amwell Twp.
1009	Flemington Boro
1010	Franklin Twp.
1011	Frenchtown Boro
1012	Glen Gardner Boro
1013	Hampton Boro
1014	High Bridge Boro
1015	Holland Twp.
1016	Kingwood Twp.
1017	Lambertville City
1018	Lebanon Boro
1019	Lebanon Twp.
1020	Milford Boro

1021	Raritan Twp.
1022	Readington Twp.
1023	Stockton Boro
1024	Tewksbury Twp.
1025	Union Twp.
1026	West Amwell Twp.
11 = Mercer Count	у
1101	East Windsor Twp.
1102	Ewing Twp.
1103	Hamilton Twp.
1104	Hightstown Boro
1105	Hopewell Boro
1106	Hopewell Twp.
1107	Lawrence Twp.
1108	Pennington Boro
1109	Princeton Boro
1110	Princeton Twp.
1111	Trenton City
1112	Washington Twp.
1113	West Windsor Twp.
120 = Middlesex C	ounty
1201	Carteret Boro
1202	Cranbury Twp.
1203	Dunellen Boro
1204	East Brunswick Twp.
1205	Edison Twp.
1206	Helmetta Boro
1207	Highland Park Boro
1208	Jamesburg Boro
1209	Old Bridge Twp.
1210	Metuchen Boro
1211	Middlesex Boro
1212	Milltown Boro
1213	Monroe Twp.
1214	New Brunswick City

1215	North Brunswick Twp.
1216	Perth Amboy City
1217	Piscataway Twp.
1218	Plainsboro Twp.
1219	Sayreville Boro
1220	South Amboy City
1221	South Brunswick Twp.
1222	South Plainfield Boro
1223	South River Boro
1224	Spotswood Boro
1225	Woodbridge Twp.
13 = Monmouth Cou	nty
1301	Allenhurst Boro
1302	Allentown Boro
1303	Asbury Park City
1304	Atlantic Highlands Boro
1305	Avon-By-The-Sea Boro
1306	Belmar Boro
1307	Bradley Beach Boro
1308	Brielle Boro
1309	Colts Neck Twp.
1310	Deal Boro
1311	Eatontown Boro
1312	Englishtown Boro
1313	Fair Haven Boro
1314	Farmingdale Boro
1315	Freehold Boro
1316	Freehold Twp.
1317	Highlands Boro
1318	Holmdel Twp.
1319	Howell Twp.
1320	Interlaken Boro
1321	Keansburg Boro
1322	Keyport Boro
1323	Little Silver Boro

1324	Loc Arbour Village
1325	Long Branch City
1326	Manalapan Twp.
1327	Manasquan Boro
1328	Marlboro Twp.
1329	Matawan Boro
1330	Aberdeen Twp.
1331	Middletown Twp.
1332	Millstone Twp.
1333	Monmouth Beach Boro
1334	Neptune Twp.
1335	Neptune City Boro
1336	Tinton Falls Boro
1337	Ocean Twp.
1338	Oceanport Boro
1339	Hazlet Twp.
1340	Red Bank Boro
1341	Roosevelt Boro
1342	Rumson Boro
1343	Sea Bright Boro
1344	Sea Girt Boro
1345	Shrewsbury Boro
1346	Shrewsbury Twp.
1347	South Belmar Boro
1348	Spring Lake Boro
1349	Spring Lake Heights Boro
1350	Union Beach Boro
1351	Upper Freehold Twp.
1352	Wall Twp.
1353	West Long Branch Boro
14 = Morris Coun	ty
1401	Boonton Town
1402	Boonton Twp.
1403	Butler Boro
1404	Chatham Boro

1405	Chatham Twp.
1406	Chester Boro
1407	Chester Twp.
1408	Denville Twp.
1409	Dover Town
1410	East Hanover Twp.
1411	Florham Park Boro
1412	Hanover Twp.
1413	Harding Twp.
1414	Jefferson Twp.
1415	Kinnelon Boro
1416	Lincoln Park Boro
1417	Madison Boro
1418	Mendham Boro
1419	Mendham Twp.
1420	Mine Hill Twp.
1421	Montville Twp.
1422	Morris Twp.
1423	Morris Plains Boro
1424	Morristown Town
1425	Mountain Lakes Boro
1426	Mount Arlington Boro
1427	Mount Olive Twp.
1428	Netcong Boro
1429	Parsippany-Troy Hills Twp.
1430	Passaic Twp.
1431	Pequannock Twp.
1432	Randolph Twp.
1433	Riverdale Boro
1434	Rockaway Boro
1435	Rockaway Twp.
1436	Roxbury Twp.
1437	Victory Gardens Boro
1438	Washington Twp.
1439	Wharton Boro

15 = Ocean Cour	ity
1501	Barnegat Light Boro
1502	Bay Head Boro
1503	Beach Haven Boro
1504	Beachwood Boro
1505	Berkeley Twp.
1506	Brick Twp.
1507	Dover Twp.
1508	Eagleswood Twp.
1509	Harvey Cedars Boro
1510	Island Heights Boro
1511	Jackson Twp.
1512	Lacey Twp.
1513	Lakehurst Boro
1514	Lakewood Twp.
1515	Lavallette Boro
1516	Little Egg Harbor Twp.
1517	Long Beach Twp.
1518	Manchester Twp.
1519	Mantaloking Boro
1520	Ocean Twp.
1521	Ocean Gate Boro
1522	Pine Beach Boro
1523	Plumsted Twp.
1524	Point Pleasant Boro
1525	Point Pleasant Beach Boro
1526	Seaside Heights Boro
1527	Seaside Park Boro
1528	Ship Bottom Boro
1529	South Toms River Boro
1530	Stafford Twp.
1531	Surf City Boro
1532	Tuckerton Boro
1533	Barnegat Twp.
16 = Passaic Cοι	ınty

1601	Bloomingdale Boro
1602	Clifton City
1603	Haledon Boro
1604	Hawthorne Boro
1605	Little Falls Twp.
1606	North Haledon Boro
1607	Passaic City
1608	Paterson City
1609	Pompton Lakes Boro
1610	Prospect Park Boro
1611	Ringwood Boro
1612	Totowa Boro
1613	Wanaque Boro
1614	Wayne Twp.
1615	West Milford Twp.
1616	West Paterson Boro
17 = Salem County	
1701	Alloway Twp.
1702	Elmer Boro
1703	Elsinboro Twp.
1704	Lower Alloways Creek Twp.
1705	Mannington Twp.
1706	Oldsman Twp.
1707	Penns Grove Boro
1708	Pennsville Twp.
1709	Pilesgrove Twp.
1710	Pittsgrove Twp.
1711	Quinton Twp.
1712	Salem City
1713	Carneys Point Twp.
1714	Upper Pittsgrove Twp.
1715	Woodstown Boro
18 = Somerset Count	у
1801	Bedminister Twp.
1802	Bernards Twp.

1803	Bernardsville Boro
1804	Bound Brook Boro
1805	Branchburg Twp.
1806	Bridgewater Twp.
1807	Far Hills Boro
1808	Franklin Twp.
1809	Green Brook Twp.
1810	Hillsborough Twp.
1811	Manville Boro
1812	Millstone Boro
1813	Montgomery Twp.
1814	North Plainfield Boro
1815	Peapack Gladstone Boro
1816	Raritan Boro
1817	Rocky Hill Boro
1818	Somerville Boro
1819	South Bound Brook Boro
1820	Warren Twp.
1821	Watchung Boro
19 = Sussex Cou	nty
1901	Andover Boro
1902	Andover Twp.
1903	Branchville Boro
1904	Byram Twp.
1905	Frankford Twp.
1906	Franklin Boro
1907	Fredon Twp.
1908	Green Twp.
1909	Hamburg Boro
1910	Hampton Twp.
1911	Hardyston Twp.
1912	Hopatcong Boro
1913	Lafayette Twp.
1914	Montague Twp.
1915	Newton Town

1916	Ogdensburg Boro			
1917	Sandyston Twp.			
1918	Sparta Twp.			
1919	Stanhope Boro			
1920	Stillwater Twp.			
1921	Sussex Boro			
1922	Vernon Twp.			
1923	Walpack Twp.			
1924	Wantage Twp.			
20 = Union County				
2001	Berkeley Heights Twp.			
2002	Clark Twp.			
2003	Cranford Twp.			
2004	Elizabeth City			
2005	Fanwood Boro			
2006	Garwood Boro			
2007	Hillside Twp.			
2008	Kenilworth Boro			
2009	Linden City			
2010	Mountainside Boro			
2011	New Providence Boro			
2012	Plainfield City			
2013	Rahway City			
2014	Roselle Boro			
2015	Roselle Park Boro			
2016	Scotch Plains Twp.			
2017	Springfield Twp.			
2018	Summit City			
2019	Union Twp.			
2020	Westfield Twp.			
2021	Winfield Twp.			
21 = Warren County				
2101	Allamuchy Twp.			
2102	Alpha Boro			
2103	Belvidere Twp.			

2104	Blairstown Twp.
2105	Franklin Twp.
2106	Frelinghuysen Twp.
2107	Greenwich Twp.
2108	Hackettstown Town
2109	Hardwick Twp.
2110	Harmony Twp.
2111	Hope Twp.
2112	Independence Twp.
2113	Knowlton Twp.
2114	Liberty Twp.
2115	Lopatcong Twp.
2116	Mansfield Twp.
2117	Oxford Twp.
2118	Pahaquarry Twp.
2119	Phillipsburg Town
2120	Pohatcong Twp.
2121	Washington Boro
2122	Washington Twp.
2123	White Twp.

Rhode Island

Value of Town	Description
00	Unknown
01	Barrington
02	Bristol
03	Burrillville
04	Central Falls
05	Charlestown
06	Coventry
07	Cranston
08	Cumberland
09	East Greenwich
10	East Providence
11	Exeter

12	Foster
13	Glocester
14	Hopkinton
15	Jamestown
16	Johnston
17	Lincoln
18	Little Compton
19	Middletown
20	Narragansett
21	Newport
22	New Shoreham
23	North Kingstown
24	North Providence
25	North Smithfield
26	Pawtucket
27	Portsmouth
28	Providence
29	Richmond
30	Scituate
31	Smithfield
32	South Kingstown
33	Tiverton
34	Warren
35	Warwick
36	Westerly
37	West Greenwich
38	West Warwick
39	Woonsocket
40	RI, city/town unknown
41	Southeastern MA
42	Rest of MA
43	СТ
44	Other states
45	Unknown
50	Attleboro, MA

51	Bellingham, MA
52	Blackstone, MA
53	Franklin, MA
54	Millville, MA
55	N. Attleboro, MA
56	Plainville, MA
57	Rehoboth, MA
58	Seekonk, MA
59	Somerset, MA
60	Swansea, MA
61	Uxbridge, MA
62	Wrentham, MA
69	Other MA
70	N. Stonington, CT
71	Stonington, CT
79	Other CT
89	Other States
99	City/town unknown

UNITn - Units of service

General Notes

The unit of service (UNITn) is retained as provided by the data source. Negative values are set to invalid (.A). If supplied by the data source, fractional values of units of service (UNIT) are rounded, with any non-zero value less than 1 (0.01-0.99) rounded to 1.

Uniform Values				
Variable	Description	Value	Value Description	
UNITn	Units of service	nnnn	Units of Service	
			Missing	
		.A	Invalid	

State Specific Notes

Kentucky

Detailed charges (CHGn) are associated with identified revenue centers (REVCDn) and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1, the units of service specified in UNIT1. Kentucky reports detailed charges (CHGn) associated with standard UB-92 revenue codes stored in REVCDn. Kentucky does not collapse or redefine ranges of revenue codes.

Information on total charges (revenue center 001) was removed from the detailed charge arrays. (CHGn, REVCDn, and UNITn). Information on total charges is available in the HCUP variables TOTCHG and TOTCHG_X.

Maine

Detailed charges (CHG1-CHG33) are associated with the identified revenue centers (REVCD1-REVCD33), and units of service (UNIT1-UNIT3). For example, CHG1 applies to the revenue center in REVCD1 and the units of service specified in UNIT1. Revenue codes are available for accommodation and ancillary charges. Units are available for accommodation charges and are coded in days.

Massachusetts

The charge and unit detail provided by Massachusetts varies across years.

- Starting in 1999: Detailed charges (CHGn) are associated with the UB-92 revenue centers (REVCDn), and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 and the units of service are specified in UNIT1. Massachusetts provides 110 revenue codes, detail charges, and units, but not all revenue centers (REVCDn) have an associated charge (CHGn) = .). During HCUP processing, the array of revenue codes, charges, and units are condensed so that only the revenue codes that have non-missing charges are retained. No information is lost.
- In 1998: Detailed charges (CHGn) are associated with the UB-92 revenue centers (REVCDn) and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 and the units of service are specified in UNIT1. Massachusetts provides 110 revenue codes, detail charges, and units, but not all revenue centers (REVCDn) have a charge (CHGn = .). The revenue codes are constant across records. For example, REVCD1 = 111 on all discharges even if there is not charge (CHG1 = .) and units (UNIT1 = .) for the revenue center.
- 1994-1997: Massachusetts reported charge details and units by <u>specific</u> UB-92 revenue centers. The detailed charges and units are retained on the HCUP files in assigned positions. For example, CHG1 is always for UB-92 revenue code 111 "Routine Medical/Surgical." Refer to the tables below for UNITn revenue center definitions for 1994-1997 files. Definitions of detail charges (CHGn) and units (UNITn) in the HCUP Massachusetts files do not necessarily match definitions in earlier years.
- 1988-1993: Massachusetts reported charge details and units by <u>aggregated</u> revenue center categories. Hospitals were responsible for mapping UB-82 revenue center codes into Massachusetts' revenue center categories. For example, all laboratory charges that would be charged to UB-82 revenue codes 300-312, 314, 319, and 971 were aggregated and reported to Massachusetts under one category. The detailed charges and units are retained on the HCUP files in assigned positions. Refer to the tables below for UNITn revenue center definitions for 1988-1993 files.

The HCUP Massachusetts files for 1988-1993 include an "unknown revenue center" charge (UNIT43) that is not included for subsequent years. Detailed charges, excluding the "unknown revenue center" charges, can be summed to the total charges (TOTUNIT and TOTUNIT X).

Unit Categories in 1994-1997

In 1994-1997, Massachusetts provided 81 charge and unit categories. Beginning in the 4th quarter of 1997, seven more unit categories (UNIT82-UNIT88) were added. Data

quality problems often appear in the first year that data elements are added, so use these data elements with caution. The following are the UB-92 revenue centers associated with each variable:

Included UB-92 Category	<u>Variable</u>	Revenue Center
Routine Medical/Surgical	UNIT1	111
Routine Obstetrics	UNIT2	112
Routine Pediatrics	UNIT3	113
Routine Psychiatric	UNIT4	114
Routine Hospice	UNIT5	115
Routine Detoxification	UNIT6	116
Routine Oncology	UNIT7	117
Routine Rehabilitation	UNIT8	118
Other Routine Accommodation	UNIT9	119
Routine Newborn	UNIT10	170
Neo-Natal ICU	UNIT11	175
Medical/Surgical ICU	UNIT12	200
Pediatric ICU	UNIT13	203
Psychiatric ICU	UNIT14	204
Post Care ICU	UNIT15	206
Burn Unit	UNIT16	207
Trauma ICU	UNIT17	208
Other Special Care ICU	UNIT18	209
Coronary Care Unit	UNIT19	210
Myocardial Infarction Unit	UNIT20	211
Pulmonary Care Unit	UNIT21	212
Heart Transplant Unit	UNIT22	213
Post Coronary Care Unit	UNIT23	214
Other Coronary Care Unit	UNIT24	219
Special Charges	UNIT25	220
Incremental Nursing Charge Rate	UNIT26	230
All Inclusive Ancillary	UNIT27	240
Pharmacy	UNIT28	250
IV Therapy	UNIT29	260
Medical/Surgical Supplies	UNIT30	270
Oncology	UNIT31	280

Durable Medical Equipment	UNIT32	290
Laboratory	UNIT33	300
Laboratory Pathological	UNIT34	310
Diagnostic Radiology	UNIT35	320
Therapeutic Radiology	UNIT36	330
Nuclear Medicine	UNIT37	340
CAT Scan	UNIT38	350
Surgical Service (OR)	UNIT39	360
Anesthesia	UNIT40	370
Blood	UNIT41	380
Blood Storage/Processing	UNIT42	390
Other Imaging Services	UNIT43	400
Respiratory Services	UNIT44	410
Physical Therapy	UNIT45	420
Occupational Therapy	UNIT46	430
Speech-Language Pathology	UNIT47	440
Emergency Room	UNIT48	450
Pulmonary Function	UNIT49	460
Audiology	UNIT50	470
Cardiology	UNIT51	480
Ambulatory Surgical Care	UNIT52	490
Outpatient Services before Admission (Invalid for Inpatient Services)	UNIT53	500
Clinic (Invalid for Inpatient Purposes)	UNIT54	510
Ambulance	UNIT55	540
Medical Social Services	UNIT56	560
MRI	UNIT57	610
Med./Surg. Supplies (extends 270)	UNIT58	620
Drugs Req. Specific Identification	UNIT59	630
Hospice Services	UNIT60	650
Cast Room	UNIT61	700
Recovery Room	UNIT62	710
Labor Room/Delivery	UNIT63	720
EKG/ECG	UNIT64	730
EEG	UNIT65	740

Gastro-Intestinal Services	UNIT66	750
Treatment or Observation Room	UNIT67	760
Lithotripsy	UNIT68	790
Inpatient Renal Dialysis	UNIT69	800
Organ Acquisition	UNIT70	810
Dialysis (National Assignment)	UNIT71	860
Miscellaneous Dialysis	UNIT72	880
Other Donor Bank	UNIT73	890
Psychiatric/Psycholog. Treatments	UNIT74	900
Psychiatric/Psychological Services	UNIT75	910
Other Diagnostic Services	UNIT76	920
Other Therapeutic Services	UNIT77	940
Other Ancillary Services	UNIT78	950
Professional Fees	UNIT79	960
Professional Fees	UNIT80	970
Professional Fees	UNIT81	980
Chronic	UNIT82	192 (Available 4th qtr 1997)
Sub-Acute	UNIT83	196 (Available 4th qtr 1997)
TCU	UNIT84	197 (Available 4th qtr 1997)
SNF	UNIT85	198 (Available 4th qtr 1997)
Treatment Room	UNIT86	761 (Available 4th qtr 1997)
Observation Room	UNIT87	762 (Available 4th qtr 1997)
Other Observation Room	UNIT88	769 (Available 4th qtr 1997)

Charge Categories in 1988-1993

For 1988-1993, Massachusetts provided 43 charge categories. The following are the revenue centers associated with each variable:

Included UB-92 Category	<u>Variable</u>	Revenue Center
Routine Medical/Surgical	UNIT1	111, 121, 131, 141, 151
Routine Obstetrics	UNIT2	112, 122, 132, 142, 152
Routine Pediatrics	UNIT3	113, 123, 133, 143, 153
Routine Psychiatric	UNIT4	114, 124, 134, 144, 154
Routine Other	UNIT5	119, 129, 139, 149, 159
Routine Newborn	UNIT6	170, 171, 172, 179
Neo-Natal ICU	UNIT7	175
Medical/Surgical ICU	UNIT8	201, 202
Pediatric ICU	UNIT9	203
Psychiatric ICU	UNIT10	204
Burn Unit	UNIT11	207
Other ICU	UNIT12	209
Coronary Care Unit	UNIT13	210
Pharmacy	UNIT14	250-259
IV Therapy	UNIT15	260
Medical/Surg Supplies	UNIT16	270, 272-275, 277-279, 290-292, 299
Laboratory	UNIT17	300-307, 309-312, 314, 319, 971
Diagnostic Radiology	UNIT18	320-321, 324, 329, 400-402, 409, 972
Therapeutic Radiology	UNIT19	330-333, 335, 339, 973
Nuclear Medicine	UNIT20	340-342, 349, 974
CAT Scanner	UNIT21	350-352, 359
Surgical Service (OR)	UNIT22	360-362, 367, 369, 975
Anesthesiology	UNIT23	370, 374, 379, 963-964
Blood	UNIT24	380-382, 389
Blood Storage Proc & Adm	UNIT25	390-391, 399
Respiratory Therapy	UNIT26	410, 412-413, 419, 976
Physical Therapy	UNIT27	420, 429, 977
Occupational Therapy	UNIT28	430, 439, 978
Speech Therapy	UNIT29	440, 449, 979
Emergency Room	UNIT30	450, 459, 981
Pulmonary Function	UNIT31	460, 469
Audiology	UNIT32	470-472, 479

Cardiac Catheterization	UNIT33	480-482, 489
Ambulance	UNIT34	540-545, 549
Recovery Room	UNIT35	710, 719
Labor and Delivery	UNIT36	720-724, 729
EKG	UNIT37	730-731, 739, 985
EEG	UNIT38	740, 749, 922, 986
Renal Dialysis	UNIT39	800-802, 805-814, 880-881
Kidney Acquisition	UNIT40	860-866
Psychology/Psychiatry	UNIT41	900-903, 909-919, 961
Other Ancillary	UNIT42	280, 490, 499, 510-512, 519, 530-531, 539, 560, 700, 709, 750, 759, 890-893, 899, 920-921,929, 940-943, 949, 960, 962, 969, 984, 987, 988, 989
Unknown Revenue Center	UNIT43	Includes charges for which the UB-82 revenue center was invalid, not used by Massachusetts Rate Setting Commission, or unspecified.

Nebraska

Detailed charges (CHGn) are associated with the identified revenue centers (REVCDn) and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 for the rate in RATE1 and the units of service specified in UNIT1. Revenue codes and units are available for accommodation and ancillary charges. Rates are available only for accommodation charges.

Nebraska provided the charge detail in a separate, linkage file that was not edited. During HCUP processing, the source file was manipulated to be consistent with the format of detail charge information in other states. The source file had one record per service, multiple records per discharge. The HCUP file has one record per patient that includes all of the provided detail.

Nevada

Detailed charges (CHGn) are associated with the identified revenue centers (REVCDn) and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 and the units of service specified in UNIT1.

In the rare event that there were more revenue charges than could be retained in the array of revenue codes, charges, and units, Nevada set the revenue code to "9999", the charge to the sum of the remaining charges, and the units to the sum of the remaining units.

New Jersey

The unit categories from New Jersey are:

UNIT1	Medical-Surgical Days
UNIT2	Obstetric Days
UNIT3	Pediatric Days
UNIT4	Psychiatric Days
UNIT5	Burn Care Unit Days
UNIT6	Intensive Care Unit Days
UNIT7	Coronary Care Unit Days
UNIT8	Neonatal Intensive Care Unit Days
UNIT9	Newborn Nursery Days
UNIT10	Emergency Room Visits
UNIT11	Clinic Visits
UNIT12	Home Health Visits
UNIT13	Anesthesiology Minutes Used
UNIT14	Cardiac Catheterization Procedures
UNIT15	Delivery and/or Gyn Procedures
UNIT16	Dialysis Treatments
UNIT17	Times Drugs or Pharmacy Used
UNIT18	Electrocardiograms
UNIT19	Laboratory Tests
UNIT20	Number of Medical Surgical Supplies
UNIT21	Number of EEGs and EMGs
UNIT22	Nuclear Medicine Procedures
UNIT23	Occupational Therapy Visits
UNIT24	Operating Room Procedures
UNIT25	Organ Transplants
UNIT26	Physical Therapy Visits
UNIT27	Psychiatric Hours (Spent with Patient)
UNIT28	Times Radiology Used
UNIT29	Respiratory Therapy Treatments
UNIT30	Speech Pathology Visits
UNIT31	Therapeutic Radiology Procedures
UNIT32	Same Day Surgery Visits

UNIT33	Excluded Revenue Codes	
UNIT34	Non-Acute Ancillary Revenue Codes	
UNIT35	Medicare, Part B, Non-Acute Codes	

New York

Detailed charges (CHGn) are associated with the identified revenue centers (REVCDn), units of service (UNITn) and rates (RATEn). For example, CHG1 applies to the revenue center in REVCD1 for the rate in RATE1 and the units of service specified in UNIT1. Revenue codes are available for accommodation and ancillary charges. Units and rates are available for accommodation charges.

UNIT1-UNIT5 contains accommodation units of service.

See note under revenue codes (REVCDn) for definitions of revenue codes associated with these accommodation rates (UNITn).

Adjustment to Charges for Interim Bills

- For 1988-1993, when the length of stay from the Discharge Data Abstract did not equal the length of the billing period from the Uniform Billing Form, total charges (TOTCHG) were set to missing (.) because this billing information pertained only to the billing period, not the complete inpatient stay. However, TOTCHG_X contains the original value from the billing record.
- Beginning in 1994, billing dates were not reported by New York and the adjustment to charge details (CHGn, RATEn, UNITn, REVCDn) was not made.

North Carolina

Beginning in 2002, detailed charges (CHGn) are associated with the identified revenue centers (REVCDn) and units of service (UNITn), and daily rates (RATEn). For example, CHG1 applies to the revenue center in REVCD1, the units of service specified in UNIT1, and the rate in RATE1. North Carolina reports detailed charges (CHGn) associated with standard UB-92 revenue codes stored in REVCDn.

South Carolina

Negative values were set to invalid (.A) during HCUP processing.

Starting in 1996

South Carolina supplied 19 unit categories:

Unit Category	<u>Description</u>			
UNIT1	All Inclusive Rate units			
UNIT2	Room & Board - General medical units			
UNIT3	Room & Board - Psych units			
UNIT4	Room & Board - Hospice units			
UNIT5	Room & Board - Detox units			
UNIT6	Room & Board - Oncology units			
UNIT7	Room & Board - Rehab units			
UNIT8	Room & Board - Other units			
UNIT9	Nursery - Levels I & Other units			
UNIT10	Nursery - Level II units			
UNIT11	Nursery - Level III units			
UNIT12	Nursery - Level IV units			
UNIT13	ICU units			
UNIT14	ICU - Pediatric units			
UNIT15	ICU - Psych units			
UNIT16	ICU - Intermediate ICU units			
UNIT17	ICU - Burn Unit units			
UNIT18	Coronary Care units			
UNIT19	Coronary Care - Intermediate CCU units			

Prior to 1995

South Carolina supplied 11 unit categories:

Unit Category	<u>Description</u>		
UNIT1	Room & Board - general medical units		
UNIT2	Room & Board - psychology units		
UNIT3	Room & Board - detoxification units		
UNIT4	Room & Board - oncology units		
UNIT5	Room & Board - rehabilitation units		
UNIT6	Room & Board - other units		
UNIT7	Nursery units		
UNIT8	Premature nursery units		
UNIT9	Neonatal ICU units		
UNIT10	ICU units		

UNIT11 CCU units	
------------------	--

Washington

Units of service (UNITn) refer to the revenue centers (REVCDn) and are reflected in the detailed charges (CHGn). For example, CHG1 applies to the revenue center in REVCD1 and the units of service specified in UNIT1.

Units are not required for all revenue sources; the units field may be coded as missing (.) or zero. See notes under revenue codes (REVCDn) for the associated units.

Beginning in 2000, if total charges are identified in the detail charges (REVCDn = "001"), the corresponding detail charge, unit, and revenue code are set to missing.

West Virginia

Detailed charges (CHGn) are associated with identified revenue centers (REVCDn) and units of service (UNITn). For example, CHG1 applies to the revenue center in REVCD1 and the units of service specified in UNIT1. West Virginia reports detailed charges (CHGn) associated with standard UB-92 revenue codes stored in REVCDn. West Virginia does not collapse or redefine ranges of revenue codes.

The first 12 variables in each array (CHG1-CHG12, REVCD1-REVCD12, and UNIT1-UNIT12) are reserved for room and board services; the remaining variables are used for ancillary services.

YEAR - Calendar year

General Notes

The discharge year (YEAR) is <u>always</u> coded. In the 1988-1997 HCUP databases, YEAR is two-digits (e.g., if the discharge year is 1990, then YEAR = 90). Beginning in the 1998 HCUP databases, YEAR is four-digits (e.g., 1998).

Uniform Values			
Variable	Description	Value	Value Description
YEAR	Calendar year	уу	2-digit calendar year in 1988-1997 data
		уууу	4-digit calendar year beginning with 1998 data

State Specific Notes

None

ZIP - Patient zip code

General Notes

The patient's zip code (ZIP) is retained as provided by the data source with the following exceptions:

- Foreign zip codes are recoded to indicate Canadian, Mexican, and other or unspecified foreign zip codes.
- Invalid zip codes are identified (ZIP = "A"). In the 1988-1992 HCUP databases, the zip code is validated against a composite list of zip codes valid as of December 1987, 1990, and 1992. Beginning in the 1993 HCUP databases, the zip code is required only to be numeric.
- The zip code for homeless patients is set to missing (ZIP = " ") in the 1988-1999 HCUP databases. Beginning in the 2000 HCUP databases, ZIP is set to "H".

Uniform Values			
Variable	Description	Value	Value Description
ZIP	Patient zip code	nnnnn	Zip codes
		С	Canada
		M	Mexico
		F	Other or unspecified foreign
		Н	Homeless (beginning with 2000 data)
		Blank	Missing
		Α	Invalid
		В	Unavailable from source (coded 1988-1997 data only)

State Specific Notes

Arizona

Arizona codes a five-digit abbreviation for the country of foreign residents. Canadian residents are coded to "Canada" (ZIP="C"), Mexican residents are coded to "Mexico" (ZIP="M"), and all others are coded to "Foreign" (ZIP="F").

Arizona provides a source category for transients and homeless ("TRANS"). Beginning in 2000, this code was assigned to the HCUP category for Homeless (ZIP = "H"). Prior to 2000, this code was recoded to blank (ZIP = " ").

Colorado

In 1993, Colorado redefined zip code categories and included a separate category for foreign and homeless patients. Colorado used only one category for all foreign zip codes, including Canada and Mexico. These are assigned to the HCUP category for Other/Unspecified Foreign (ZIP = "F"). Colorado used the zip code "00003" for homeless patients. Beginning in 2000, this zip code was assigned to the HCUP category for Homeless (ZIP = "H"). Prior to 2000, this zip code was recoded to blank (ZIP = " ").

Florida

Florida masked zip codes of areas in Florida where the population is less than 500 people. These masked codes were set to missing (ZIP = " ") during HCUP processing.

Florida masks zip codes for patients who reside out-of-state. These masked codes were set to missing (ZIP = " ") during HCUP processing.

Florida reports a single "Foreign Country" category which includes Canada and Mexico. During HCUP processing, "Foreign Country" was assigned to the uniform category for "Other/Unspecified Foreign" (ZIP = "F").

Beginning in 1997, Florida reports a separate zip code category for homeless patients. Beginning in 2000, this zip code was assigned to the HCUP category for Homeless (ZIP = "H"). Prior to 2000, this zip code was recoded to blank (ZIP=" ").

Iowa

Iowa does not code foreign zip codes. Any non-U.S. zip codes would appear as missing (' ') or invalid ('A').

Kentucky

Kentucky uses only one category for all foreign zip codes, including Canada and Mexico. These are assigned to the HCUP category for Other/Unspecified Foreign (ZIP = "F").

Michigan

Michigan reports four separate ZIP Code categories for Sault Ste. Marie, Sarnia, Windsor, and "All other Canada." For 2001-2002, the ZIP Code category for "All other

Canada" was recoded to blank (ZIP=" "). Beginning in 2003, this ZIP Code was also assigned to the HCUP category for Canada (ZIP="C").

Beginning in 2001, Michigan supplies a five digit patient ZIP Code and identifies foreign residents. Canadian residents are coded to "Canada" (ZIP="C") and all others are coded to "Foreign" (ZIP="F").

Prior to 2001, Michigan only supplied the first three digits of the patient's ZIP Code, ZIP is blank ("").

Nebraska

Nebraska does not separately classify Canadian, Mexican, or other foreign zip codes.

New Jersey

New Jersey does not report foreign, Canadian or Mexican zip postal codes. In the source data, these ZIP codes are blank. During HCUP processing, blank values were assigned to missing (" ").

New York

For 1988-1992, New York uses only one category for all foreign zip codes, including Canada and Mexico. These are assigned to the HCUP category for Other/Unspecified Foreign (ZIP = "F").

Beginning in 1993, New York separately classifies Canadian, but not Mexican zip codes. Mexican zip codes are included in the HCUP category for Other/Unspecified Foreign (ZIP = "F").

North Carolina

North Carolina does not separately classify Canadian, Mexican, or other foreign zip codes.

Oregon

Oregon does not report foreign, Canadian, or Mexican postal codes, but instead reports them as "missing" or "invalid" ZIP code values. During HCUP processing, these were assigned as missing (ZIP = blank) or invalid (ZIP = .A).

Rhode Island

Rhode Island does not separately classify Canadian, Mexican, or other foreign zip codes.

Utah

Utah uses only one category for all foreign zip codes, including Canada and Mexico. These are assigned to the HCUP category for Other/Unspecified Foreign (ZIP = "F").

Utah masks zip codes under the following conditions:

- Patients in Utah or non-Utah zip codes with less than 30 discharges in a calendar vear.
- Patients with the Major Diagnosis Code of "Human Immunodeficiency Virus Infection" (value 25), and
- Diagnosis Related Groups "Alcohol/Drug Abuse or Dependence" (values 433-437).

During HCUP processing, the masked zip code is recoded as missing (ZIP = blank).

Utah reports a zip code category for homeless patients. Beginning in 2000, this zip code was assigned to the HCUP category for Homeless (ZIP = "H"). Prior to 2000, this zip code was recoded to blank (ZIP = " ").

Wisconsin

Wisconsin uses only one category for all foreign zip codes, including Canada and Mexico. These are assigned to the HCUP category for Other/Unspecified Foreign (ZIP = "F").

Wisconsin suppressed zip codes with low frequency (less than 30 discharges per quarter) or low population (less than 1000 people). These zip codes will appear as missing (" ") in the HCUP Wisconsin data.

West Virginia

West Virginia does not separately classify Canadian, Mexican, or other foreign zip codes.

ZIP_S - Synthetic patient zip code

General Notes

ZIP_S contains a fixed-key (one-to-one) encryption of the patient's residential zip code (ZIP). To prevent inadvertent or intentional identification of specific patients based on the patient's residential zip code, the last 2 digits were encrypted. While it is still possible to identify the state of a patient's residence using the first three unencrypted zip code digits, ZIP_S does not allow placement of a specific patient within a narrower, zip code-based geography.

If the zip code in the HCUP outpatient surgery databases and the inpatient databases are the same, the synthetic identifier, ZIP_S is the same.

Users of the encrypted zip code data element are strictly forbidden to identify the actual zip code associated with the encrypted zip code.

The encrypted zip code (ZIP_S) contains the following special values:

- Canadian, Mexican, and other or unspecified foreign zip codes (ZIP_S = "C", "M", or "F", respectively).
- Invalid zip codes (ZIP = "A"). In the 1988-1992 HCUP databases, the zip code is validated against a composite list of zip codes valid as of December 1987, 1990, and 1992. Beginning in the 1993 HCUP databases, the zip code is required only to be numeric.
- Homeless patients. In the 1988-1999 HCUP databases, (ZIP_S = " ") . Beginning in the 2000 HCUP databases, ZIP_S = "H".

Uniform Values			
Variable	Description	Value	Value Description
	Synthetic patient	nnnnn	Synthetic zip codes
	zip code	С	Canada
		М	Mexico
		F	Other or unspecified foreign
		Н	Homeless (beginning with 2000 data)
		Blank	Missing
		А	Invalid
		В	Unavailable from source (coded 1988-1997 data only)

State Specific Notes

Maine

Maine does not separately classify Canadian, Mexican, or other foreign zip codes.

Utah

Utah uses only one category for all foreign zip codes, including Canada and Mexico. These are assigned to the HCUP category for Other/Unspecified Foreign (ZIP_S = "F").

Utah masks zip codes under the following conditions:

- Patients in Utah or non-Utah zip codes with less than 30 discharges in a calendar year,
- Patients with the Major Diagnosis Code of "Human Immunodeficiency Virus Infection" (value 25), and
- Diagnosis Related Groups "Alcohol/Drug Abuse or Dependence" (values 433-437).

Utah reports a zip code category for homeless patients. Beginning in 2000, this zip code was assigned to the HCUP category for Homeless (ZIP_S = "H"). Prior to 2000, this zip code was recoded to blank (ZIP_S = " ").

ZIP3 - Patient ZIP Code, first 3 digits

General Notes

The first three digits of the patient's ZIP Code (ZIP3) provides sufficient information to identify the location of a patient's residence within a broad region within a state. ZIP3 is retained as provided by the data source with the following exceptions:

- Foreign ZIP Codes are recoded to indicate Canadian, Mexican, and other or unspecified foreign ZIP Codes.
- Non-numeric ZIP Codes are identified (ZIP = "A").
- The ZIP Code for homeless patients is set to "H".

Uniform Values			
Variable	Description	Value	Value Description
ZIP3 Patient ZIP Code, first 3 digits		nnn	First 3 digits of patient ZIP Code
		С	Canada
	aigits	M	Mexico
		F	Other or unspecified foreign
		Н	Homeless
		Blank	Missing
		Α	Invalid

State Specific Notes

None